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now available on STN  
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NEWS 7 Sep 03 JAPIO has been reloaded and enhanced  
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NEWS 11 Oct 24 BEILSTEIN adds new search fields  
NEWS 12 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN  
NEWS 13 Nov 18 DKILIT has been renamed APOLLIT  
NEWS 14 Nov 25 More calculated properties added to REGISTRY  
NEWS 15 Dec 04 CSA files on STN  
NEWS 16 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date  
NEWS 17 Dec 17 TOXCENTER enhanced with additional content  
NEWS 18 Dec 17 Adis Clinical Trials Insight now available on STN  
NEWS 19 Jan 29 Simultaneous left and right truncation added to COMPENDEX,  
ENERGY, INSPEC  
NEWS 20 Feb 13 CANCERLIT is no longer being updated  
NEWS 21 Feb 24 METADEX enhancements  
NEWS 22 Feb 24 PCTGEN now available on STN  
NEWS 23 Feb 24 TEMA now available on STN  
NEWS 24 Feb 26 NTIS now allows simultaneous left and right truncation  
NEWS 25 Feb 26 PCTFULL now contains images  
NEWS 26 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results  
NEWS 27 Mar 20 EVENTLINE will be removed from STN  
NEWS 28 Mar 24 PATDPAFULL now available on STN  
NEWS 29 Mar 24 Additional information for trade-named substances without  
structures available in REGISTRY  
NEWS 30 Apr 11 Display formats in DGENE enhanced  
NEWS 31 Apr 14 MEDLINE Reload  
NEWS 32 Apr 17 Polymer searching in REGISTRY enhanced  
NEWS 33 Apr 21 Indexing from 1947 to 1956 being added to records in CA/CAPLUS  
NEWS 34 Apr 21 New current-awareness alert (SDI) frequency in  
WPIDS/WPINDEX/WPIX  
NEWS 35 Apr 28 RDISCLOSURE now available on STN  
NEWS 36 May 05 Pharmacokinetic information and systematic chemical names  
added to PHAR  
NEWS 37 May 15 MEDLINE file segment of TOXCENTER reloaded  
NEWS 38 May 15 Supporter information for ENCOMPPAT and ENCOMPLIT updated  
NEWS 39 May 16 CHEMREACT will be removed from STN  
NEWS 40 May 19 Simultaneous left and right truncation added to WSCA  
NEWS 41 May 19 RAPRA enhanced with new search field, simultaneous left and  
right truncation  
NEWS 42 Jun 06 Simultaneous left and right truncation added to CBNB  
NEWS 43 Jun 06 PASCAL enhanced with additional data

10/ 075,073

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT  
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),  
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
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NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
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FILE 'HOME' ENTERED AT 10:39:23 ON 07 JUN 2003

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 10:39:37 ON 07 JUN 2003

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STRUCTURE FILE UPDATES: 6 JUN 2003 HIGHEST RN 526915-11-7

DICTIONARY FILE UPDATES: 6 JUN 2003 HIGHEST RN 526915-11-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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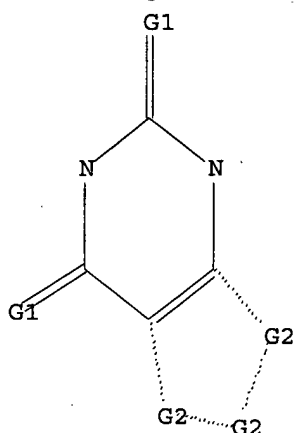
L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

10/ 075,073



G1 O,S

G2 C,O,S,N

Structure attributes must be viewed using STN Express query preparation.

=>

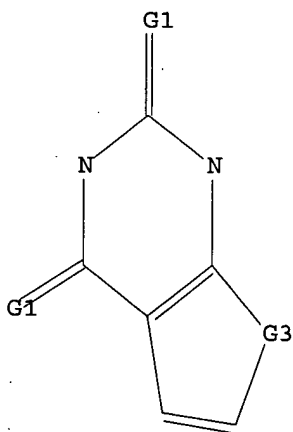
Uploading 10075073a.str

L2 STRUCTURE UPLOADED

=> d l2

L2 HAS NO ANSWERS

L2 STR



G1 O,S

G2 C,O,S,N

G3 O,S,N

Structure attributes must be viewed using STN Express query preparation.

=> s l1 ful

FULL SEARCH INITIATED 10:41:12 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 161203 TO ITERATE

10/ 075,073

100.0% PROCESSED 161203 ITERATIONS  
SEARCH TIME: 00.00.02

39245 ANSWERS

L3 39245 SEA SSS FUL L1

=> s l2 ful  
FULL SEARCH INITIATED 10:41:25 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 17991 TO ITERATE

100.0% PROCESSED 17991 ITERATIONS  
SEARCH TIME: 00.00.01

2845 ANSWERS

L4 2845 SEA SSS FUL L2

=> file caplus  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
297.90	298.11

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 10:42:59 ON 07 JUN 2003  
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FILE COVERS 1907 - 7 Jun 2003 VOL 138 ISS 24  
FILE LAST UPDATED: 6 Jun 2003 (20030606/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3  
L5 55566 L3

=> s l4  
L6 306 L4

=> s l3/biol  
55566 L3  
5427635 BIOL/RL  
L7 34683 L3/BIOL  
(L3 (L) BIOL/RL)

=> s l4/biol  
306 L4  
5427635 BIOL/RL  
L8 90 L4/BIOL  
(L4 (L) BIOL/RL)

=> d l8 1- ibib abs fhitr  
YOU HAVE REQUESTED DATA FROM 90 ANSWERS - CONTINUE? Y/(N):y

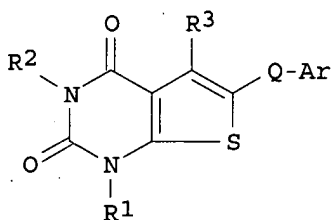
L8 ANSWER 1 OF 90 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 2003:117829 CAPLUS  
 DOCUMENT NUMBER: 138:153549  
 TITLE: Preparation of thieno[2,3-d]pyrimidinediones and their use in the modulation of autoimmune disease  
 INVENTOR(S): Reynolds, Rachel Heulwen; Ingall, Anthony Howard; Rasul, Rukhsana Tasneem; Guile, Simon David; Cooper, Martin Edward  
 PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited  
 SOURCE: PCT Int. Appl., 148 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003011868	A1	20030213	WO 2002-GB3399	20020724

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2001-18479 A 20010728  
 OTHER SOURCE(S): MARPAT 138:153549  
 GI



I

AB The invention relates to thieno[2,3-d]pyrimidinediones (shown as I; variables defined below; e.g. (S)-5-(4-hydroxyisoxazolidin-2-ylcarbonyl)-3-methyl-1-(isobutyl)-6-(4-quinolinylmethyl)thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione), methods of prepg., pharmaceutical compns. contg. and methods of using I, particularly in the modulation of autoimmune disease. For I: R1 and R2 = C1-6 alkyl, C3-6 alkenyl, C3-6 cycloalkyl C1-3 alkyl or C3-6 cycloalkyl; each of which may be optionally substituted by 1 to 3 halogen atoms; R3 = isoxazolidin-2-ylcarbonyl or tetrahydroisoxazin-2-ylcarbonyl wherein each ring is optionally substituted by one hydroxy group; Q is CO- or C(R4)(R5)- (wherein R4 is H or C1-4 alkyl and R5 is H or hydroxy group); Ar = 5- to 10-membered arom. ring system wherein up to 4 ring atoms may be heteroatoms = N, O and S, the ring system being optionally substituted by .gtoreq.1 substituents as defined in the specification. In tests of inhibition of phorbol myristate acetate

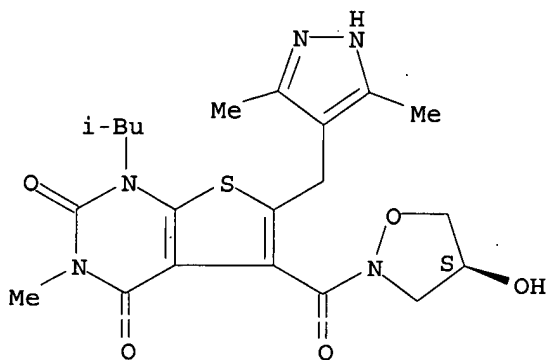
(PMA)/ionomycin-stimulated peripheral blood mononuclear cell proliferation, IA50 values for I were < 1 .times.  $10^{-6}$  M; e.g. 1.7 .times.  $10^{-10}$  M for (S)-5-(4-hydroxyisoxazolidin-2-ylcarbonyl)-3-methyl-1-(isobutyl)-6-(4-quinolinylmethyl)thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione and 5 .times.  $10^{-9}$  for (S)-5-(4-hydroxyisoxazolidin-2-ylcarbonyl)-3-methyl-1-(isopropyl)-6-(4-quinolinylmethyl)thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione. More than 40 examples of prepn. of I are included. For example, 136 mg of (S)-5-(4-hydroxyisoxazolidin-2-ylcarbonyl)-3-methyl-1-(isobutyl)-6-(4-quinolinylmethyl)thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione was prepd. by adding to a suspension of sodium 1,2,3,4-tetrahydro-3-methyl-1-(isobutyl)-2,4-dioxo-6-(4-quinolinylmethyl)thieno[2,3-d]pyrimidine-5-carboxylate (157 mg) in  $\text{CH}_2\text{Cl}_2$  (5 mL) 1-hydroxybenzotriazole hydrate (108 mg), stirring the mixt. for 15 min, adding 1-ethyl-3-(3'-dimethylaminopropyl)carbodiimide hydrochloride (135 mg), stirring for 1 h, adding (S)-4-isoxazolidinol hydrochloride (69 mg) and  $\text{NEt}_3$  (147 .mu.L), stirring the reaction mixt. for 18 h concg. under reduced pressure, and purifying by column chromatog. Prepn. of reactant sodium 1,2,3,4-tetrahydro-3-methyl-1-(isobutyl)-2,4-dioxo-6-(4-quinolinylmethyl)thieno[2,3-d]pyrimidine-5-carboxylate from N-hydroxyphthalimide and (R)-(+)-epichlorohydrin via intermediates 2-(4-hydroxyisoxazolidin-2-yl)carbonylbenzoate, (S)-4-isoxazolidinol hydrochloride, Et 1,2,3,4-tetrahydro-3-methyl-1-(isobutyl)-2,4-dioxothieno[2,3-d]pyrimidine-5-carboxylate, 1,2,3,4-tetrahydro-6-[hydroxy(4-quinolinyl)methyl]-3-methyl-1-(isobutyl)-2,4-dioxothieno[2,3-d]pyrimidine-5-carboxylate and 1,2,3,4-tetrahydro-3-methyl-1-(isobutyl)-2,4-dioxo-6-(4-quinolinylmethyl)thieno[2,3-d]pyrimidine-5-carboxylate are also described.

IT **496791-37-8P**, (S)-6-[(3,5-Dimethyl-1H-pyrazol-4-yl)methyl]-5-[(4-hydroxyisoxazolidin-2-yl)carbonyl]-1-isobutyl-3-methylthieno[2,3-d]pyrimidine-2,4(1H,3H)-dione  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (drug candidate; prepn. of thienopyrimidinediones and their use in modulation of autoimmune diseases)

RN 496791-37-8 CAPLUS

CN 4-Isioxazolidinol, 2-[[6-[(3,5-dimethyl-1H-pyrazol-4-yl)methyl]-1,2,3,4-tetrahydro-3-methyl-1-(2-methylpropyl)-2,4-dioxothieno[2,3-d]pyrimidin-5-yl]carbonyl]-, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2003:76788 CAPLUS

DOCUMENT NUMBER: 138:122656

TITLE: Preparation of thieno[2,3-d]pyrimidinediones as immunosuppressants for treatment of obstructive airway disease

INVENTOR(S): Reynolds, Rachel Heulwen; Ingall, Anthony Howard

PATENT ASSIGNEE(S): Astrazeneca Ab, Swed.; Astrazeneca Uk Limited

SOURCE: PCT Int. Appl.; 95 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

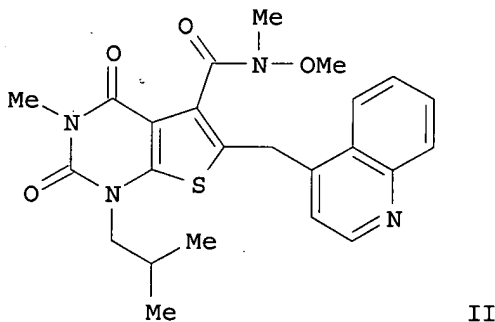
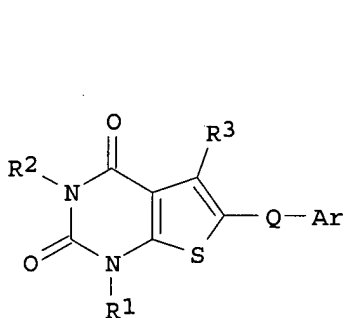
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003008422	A1	20030130	WO 2002-GB3250	20020716
<p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM</p> <p>RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG</p>				

PRIORITY APPLN. INFO.: GB 2001-17583 A 20010719

OTHER SOURCE(S): MARPAT 138:122656

GI



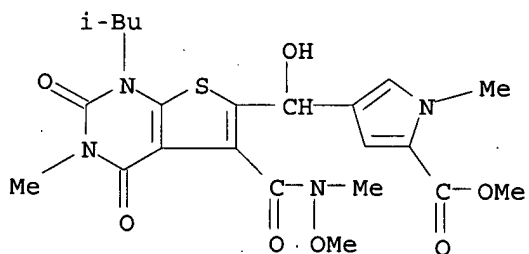
AB Title compds. I [wherein R1 and R2 = independently (halo)alkyl, (halo)alkenyl, or (halo)cycloalkyl(alkyl); R3 = CONR10YR11 or SO2NR10YR11; Y = O, S, or NR12; R10 and R11 = independently (un)substituted alkyl; R12 = H or alkyl; Q = CO or CR4R5; R4 = H or alkyl; R5 = H or OH; Ar = (un)substituted 5-10 membered (hetero)arom. ring; or pharmaceutically acceptable salts or prodrugs thereof] were prepd. as T cell proliferation inhibitors. For example, 6-mercapto-3-methyl-1-(2-methylpropyl)pyrimidine-2,4(1H,3H)-dione was reacted with Et bromopyruvate in the presence of K2CO3 to give Et 1,2,3,4-tetrahydro-3-methyl-1-(2-methylpropyl)-2,4-dioxothieno[2,3-d]pyrimidine-5-carboxylate. Treatment with lithium diisopropylamide in THF and addn. of 4-quinolinecarboxaldehyde afforded 6-substituted thienopyrimidinedione. Redn. with trifluoroacetic anhydride, sapon. with 1M NaOH, and amidation with N,O-dimethylhydroxylamine.bul.HCl provided II. In a phorbol 12-myristate 13-acetate (PMA)/ionomycin-stimulated peripheral blood mononuclear cell

(PBM) proliferation assay, the latter exhibited an  $IA_{50}$  of  $5.88 \times 10^{-9}$  M. I are useful as immunosuppressants for treatment of obstructive airway disease and other autoimmune diseases.

IT **491615-50-0P**, Methyl 4-[[[1,2,3,4-tetrahydro-5-[(N-methoxy-N-methylamino)carbonyl]-3-methyl-1-(2-methylpropyl)-2,4-dioxothieno[2,3-d]pyrimidin-6-yl] (hydroxy)methyl]-1-methyl-1H-pyrrole-2-carboxylate  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (immunosuppressant; prepn. of thieno[2,3-d]pyrimidinedione immunosuppressants by reacting mercaptopyrimidinediones with bromopyruvates or bromoxobutanoates)

RN 491615-50-0 CAPLUS

CN 1H-Pyrrole-2-carboxylic acid, 4-[hydroxy[1,2,3,4-tetrahydro-5-[(methoxymethylamino)carbonyl]-3-methyl-1-(2-methylpropyl)-2,4-dioxothieno[2,3-d]pyrimidin-6-yl]methyl]-1-methyl-, methyl ester (9CI)  
 (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2003:13467 CAPLUS

DOCUMENT NUMBER: 138:184210

TITLE: Rigidins B-D, new pyrrolopyrimidine alkaloids from a tunicate Cystodytes species

AUTHOR(S): Tsuda, Masashi; Nozawa, Kohei; Shimbo, Kazutaka; Kobayashi, Jun'ichi

CORPORATE SOURCE: Graduate School of Pharmaceutical Sciences, Hokkaido University, Sapporo, 060-0812, Japan

SOURCE: Journal of Natural Products (2003), 66(2), 292-294

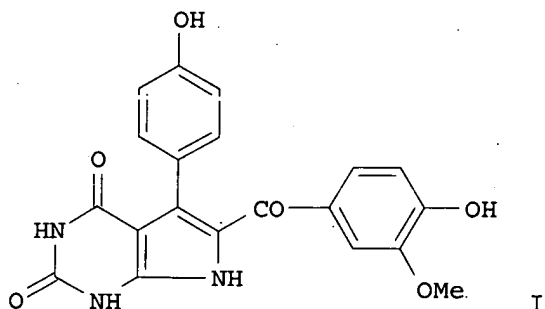
CODEN: JNPRDF; ISSN: 0163-3864

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB Three new pyrrolopyrimidine alkaloids, rigidins B-D (e.g. I, rigidin B), have been isolated from an Okinawan marine tunicate *Cystodytes* sp., and the structures were elucidated on the basis of spectroscopic data.

IT 132160-44-2, Rigidin

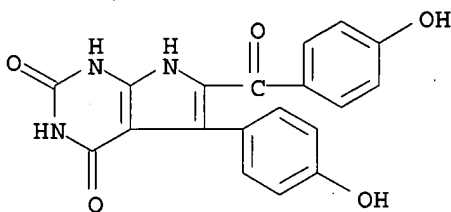
RL: BSU (Biological study, unclassified); BIOL (Biological study)

; BIOL (Biological study)

(pyrrolopyrimidine alkaloids from tunicate *Cystodytes* species)

RN 132160-44-2 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 6-(4-hydroxybenzoyl)-5-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:898393 CAPLUS

DOCUMENT NUMBER: 138:66168

TITLE: Discovery of a Thieno[2,3-d]pyrimidine-2,4-dione Bearing a p-Methoxyureidophenyl Moiety at the 6-Position: A Highly Potent and Orally Bioavailable Non-Peptide Antagonist for the Human Luteinizing Hormone-Releasing Hormone Receptor

AUTHOR(S): Sasaki, Satoshi; Cho, Nobuo; Nara, Yoshi; Harada, Masataka; Endo, Satoshi; Suzuki, Nobuhiro; Furuya, Shuichi; Fujino, Masahiko

CORPORATE SOURCE: Pharmaceutical Research Division, Takeda Chemical Industries Ltd., Ibaraki, 300-4293, Japan

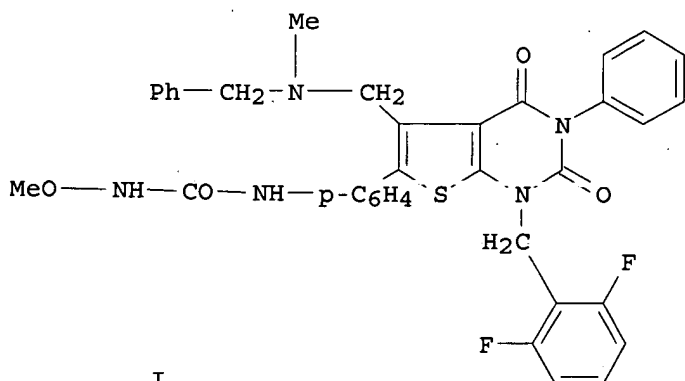
SOURCE: Journal of Medicinal Chemistry (2003), 46(1), 113-124  
CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB We have previously disclosed the first potent and orally effective non-peptide antagonist for the human LH-releasing hormone (LHRH) receptor, a thieno[2,3-b]pyridin-4-one deriv., T-98475. Extensive research on developing non-peptide LHRH antagonists has been carried out by employing a strategy of replacing the thienopyridin-4-one nucleus with other heterocyclic surrogates. We describe herein the design and synthesis of a series of thieno[2,3-d]pyrimidine-2,4-dione derivs. contg. a biaryl moiety, which led to the discovery of a highly potent and orally active non-peptide LHRH antagonist, 5-(N-benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-methoxyureido)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4(1H,3H)-dione (I: TAK-013). Compd. I showed high binding affinity and potent in vitro antagonistic activity for the human receptor with half-maximal inhibition concn. (IC<sub>50</sub>) values of 0.1 and 0.06 nM, resp. Oral administration of I caused almost complete suppression of the plasma LH levels in castrated male cynomolgus monkeys at a 30 mg/kg dose with sufficient duration of action (more than 24 h). The results demonstrated that the thienopyrimidine-2,4-dione core is an excellent surrogate for the thienopyridin-4-one and that thienopyrimidine-2,4-diones and thienopyridin-4-ones constitute a new class of potent and orally bioavailable LHRH receptor antagonists. Furthermore, mol. modeling studies indicate that the unique methoxyurea side chain of I preferentially forms an intramol. hydrogen bond between the aniline NH and the methoxy oxygen atom. The hydrogen bond will shield the hydrogen bonding moieties from the solvent and reduce the desolvation energy cost. It is therefore speculated that the intramol. hydrogen bond resulting from judicious incorporation of an oxygen atom into the terminal alkyl group of the urea may increase the apparent lipophilicity to allow increased membrane permeability and consequently to improve the oral absorption of I in monkeys. On the basis of its profile, compd. I has been selected as a candidate for clin. trials and it is expected that it will provide a new class of potential therapeutic agents for the clin. treatment of a variety of sex-hormone-dependent diseases.

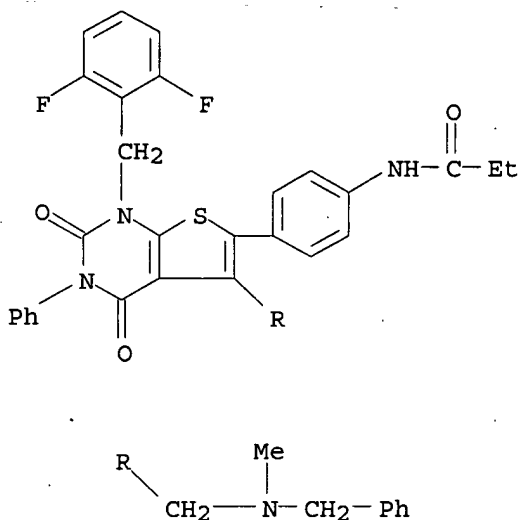
IT 181817-21-0P

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of methoxyureidophenyl thienopyrimidinediones as LHRH receptor antagonists)

RN 181817-21-0 CAPLUS

CN Propanamide, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-[[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3-d]pyrimidin-6-yl]phenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:747681 CAPLUS

DOCUMENT NUMBER: 137:273233

TITLE: PARP inhibitors for treatment of retinal degeneration or chemotherapy-induced cell injury

INVENTOR(S): Tatsuno, Toru; Ikeda, Kazuhito; Aino, Hiroshi; Ogawa, Hiroki

PATENT ASSIGNEE(S): Sumitomo Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002284699	A2	20021003	JP 2001-92373	20010328
PRIORITY APPLN. INFO.:			JP 2001-92373	20010328

OTHER SOURCE(S): MARPAT 137:273233

AB The invention provides an agent for treatment of retinal degeneration related to visual cell degeneration or treatment of chemotherapy-induced cell injury, contg. a poly(ADP-ribose)polymerase (PARP) inhibitor. A compd. 6,7-dihydro-1H,5H-pyrid[3,2,1-ij]quinazoline-1,3(2H)-dione was prepd., and its effect on n-methyl-N-nitrosourea (MNU)-induced retinal degeneration in rats was examd.

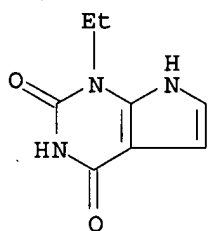
IT 53680-91-4

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(PARP inhibitors for treatment of retinal degeneration or chemotherapy-induced cell injury)

RN 53680-91-4 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 1-ethyl- (9CI) (CA INDEX NAME)



L8 ANSWER 6 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:747672 CAPLUS

DOCUMENT NUMBER: 137:294965

TITLE: Medicinal composition containing aryl or heteroarylsulfonamide compounds as matrix metalloproteinase inhibitors

INVENTOR(S): Kimura, Tomio; Tamaki, Kazuhiko; Miyazaki, Shojiro; Kurakata, Shinichi; Fujiwara, Kosaku

PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 107 pp.

CODEN: JKXXAF

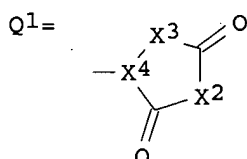
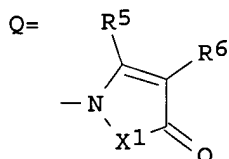
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002284686	A2	20021003	JP 2001-91645	20010328
PRIORITY APPLN. INFO.:			JP 2001-91645	20010328
OTHER SOURCE(S):	MARPAT 137:294965			
GI				



AB Disclosed is a medicinal compn. contg. aryl or heteroarylsulfonamide deriv. represented by the following general formula R<sup>4</sup>-M-L-SO<sub>2</sub>-N(R<sup>3</sup>)CH(AR<sup>2</sup>)COR<sup>1</sup>, pharmacol. acceptable salts, esters, or other derivs. thereof [wherein R<sup>1</sup> = OH, (un)protected NHOH; R<sup>2</sup> = Q, Q<sup>1</sup>; wherein X<sup>1</sup> = O, CO<sub>2</sub>, CO-S, CO, S(O)<sub>m</sub> (m = 0, 1, 2), (un)satd. NH, CH<sub>2</sub>, or coh<sub>2</sub>; X<sup>2</sup> = O, S, (un)substituted NH or CH<sub>2</sub>; X<sup>3</sup> = N, (un)substituted CH; R<sup>3</sup> = H, (un)substituted alkyl, cycloalkyl, alkenyl, or alkynyl; L = (un)substituted arylene or heteroarylene; M = O, S; R<sup>4</sup> = (un)substituted lower alkyl, aryl, or heteroaryl] as the active ingredient. The medicinal compn. is useful as a matrix metalloproteinase inhibitor, in particular matrix metalloproteinase-13 (MMP-13) and/or aggrecanase inhibitor, in the prevention and/or treatment of chronic articular rheumatism, osteoarthritis, metastasis, invasion, or proliferation of cancer, or breast cancer. Thus, Mitsunobu reaction of 2-(2-hydroxyethyl)-N-methyl-N-(4-phenoxybenzenesulfonyl)glycine allyl ester and 3-(2-trimethylsilyl)ethoxymethylpyrido[2,3-d]pyrimidine-2,4-dione using Ph<sub>3</sub>P and di-Et azodicarboxylate in THF at room temp. for 1 h gave N-methyl-N-(4-phenoxybenzenesulfonyl)-2-[2-[3-(2-

trimethylsilyl)ethoxymethyl-2,4-dioxypyrido[2,3-d]pyrimidin-1-yl)ethyl]glycine allyl ester which was desilylated by treatment with CF<sub>3</sub>CO<sub>2</sub>H in CH<sub>2</sub>Cl<sub>2</sub> at room temp. for 3 h and saponified with a mixt. of 1 N aq. NaOH and THF at room temp. for 30 min, and acidified with 1 N aq. HCl to give N-methyl-N-(4-phenoxybenzenesulfonyl)-2-[2-(2,4-dioxypyrido[2,3-d]pyrimidin-1-yl)ethyl]glycine (I). Amidation of I with hydroxylamine using N,N'-carbonyldiimidazole in a mixt. of CH<sub>2</sub>Cl<sub>2</sub>, THF, and H<sub>2</sub>O gave N-hydroxy-N.alpha.-methyl-N.alpha.-(4-phenoxybenzenesulfonyl)-2-[2-(2,4-dioxypyrido[2,3-d]pyrimidin-1-yl)ethyl]glycinamide (II). II and N-hydroxy-N.alpha.-methyl-N.alpha.-(4-phenoxybenzenesulfonyl)-2-[2-(2,4-dioxoquinazolin-1-yl)ethyl]glycinamide showed IC<sub>50</sub> of 0.39 and 0.36 nM, resp., against MMP-13. A powder, a granule, and a tablet formulation contg. the specific title compd. were described.

IT 464216-36-2P

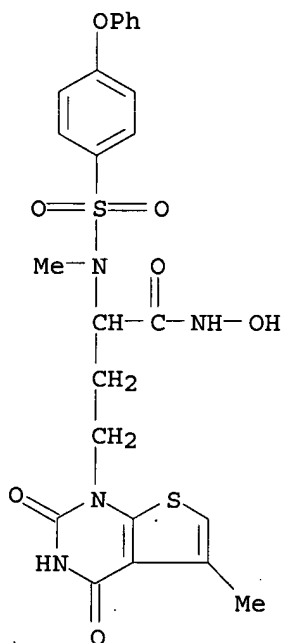
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);

USES (Uses)

(prepn. of aryl or heteroarylsulfonamide derivs. as matrix metalloproteinase inhibitors and medicinal compn. contg. them)

RN 464216-36-2 CAPLUS

CN Thieno[2,3-d]pyrimidine-1(2H)-butanamide, 3,4-dihydro-N-hydroxy-5-methyl-.alpha.-[methyl[(4-phenoxyphenyl)sulfonyl]amino]-2,4-dioxo- (9CI) (CA INDEX NAME)



L8 ANSWER 7 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:637683 CAPLUS

DOCUMENT NUMBER: 137:185504

TITLE: Preparation of thieno[2,3-d]pyrimidindiones as matrix metalloproteinase inhibitors for treatment of cancer, rheumatoid arthritis, and osteoarthritis

INVENTOR(S): Harter, William Glen; Li, Jie Jack; Ortwine, Daniel Fred; Shuler, Kevon Ray; Yue, Wen-song

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: PCT Int. Appl., 278 pp.

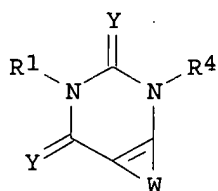
CODEN: PIXXD2

DOCUMENT TYPE: Patent

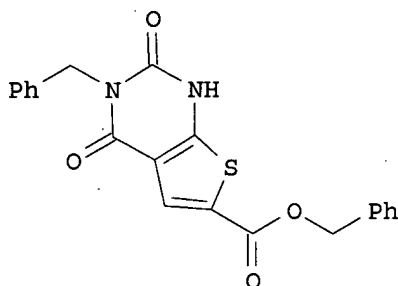
LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002064598	A1	20020822	WO 2002-IB204	20020118
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003004172	A1	20030102	US 2002-75073	20020213
PRIORITY APPLN. INFO.:		US 2001-268756P P 20010214		
OTHER SOURCE(S):		MARPAT 137:185504		
GI				

*Applicant's*



I



II

AB Title fused pyrimidinones I [wherein C2W = 5-membered (hetero)cyclic diradical substituted with ABR3 and optionally substituted with R2; A = CO or SO0-2; B = O or NR5; or AB = C.tplbond.C; R1, R4, and R5 = independently H, alkyl, alkenyl, alkynyl, (CH2)n-(hetero)aryl, (CH2)n-cycloalkyl, (CH2)n-heterocyclyl, or alkanoyl; R2 and R3 = independently H, alkyl, alkenyl, alkynyl CN, NO2, NR4R5, (CH2)n-cycloalkyl, or (CH2)n-(hetero)aryl; or R2 = halo; n = 0-5; or NR4R5 = (un)substituted heterocyclyl; with the proviso that R1 and R3 .noteq. both H or alkyl; or pharmaceutically acceptable salts thereof] were prepd. as matrix metalloproteinase (MMP) inhibitors, esp. as selective MMP-13 inhibitors. For example, 3-benzyl-6-chloro-1H-pyrimidine-2,4-dione was coupled with mercaptoacetic acid Et ester using Na2CO3 in EtOH (67%) and the product cyclized with POCl3 in anhyd. DMF to give 3-benzyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid Et ester (95%). Sapon. (96%) followed by esterification with benzyl alc. and 1-cyclohexyl-3-(2-morpholinoethyl)carbodiimide metho-p-toluenesulfonate afforded II (12%). The latter selectively inhibited the hydrolytic activity of MMP-13 (0.61 .mu.M) over MMP-1 (100 .mu.M), MMP-2 (100 .mu.M), MMP-3 (18 .mu.M), MMP-7 (100 .mu.M), MMP-9 (100 .mu.M), MMP-12 (100 .mu.M), and MMP-14 (100 .mu.M) with the indicated IC50 values. I are useful for the treatment of diseases mediated by the MMP-13 enzyme, such as cancer, rheumatoid arthritis, or osteoarthritis (no data). Formulations of I are also disclosed.

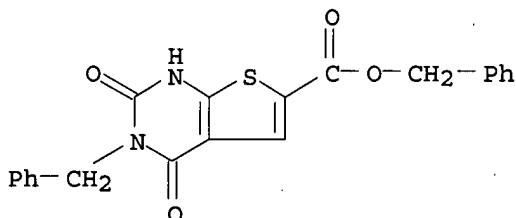
IT **448964-75-8P**, 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological

**study**); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (MMP inhibitor; prepn. of thienopyrimidinediones as MMP inhibitors for  
 treatment of cancer, rheumatoid arthritis, and osteoarthritis)

RN 448964-75-8 CAPLUS

CN Thieno[2,3-d]pyrimidine-6-carboxylic acid, 1,2,3,4-tetrahydro-2,4-dioxo-3-(phenylmethyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:637472 CAPLUS

DOCUMENT NUMBER: 137:201321

TITLE: Preparation of substituted isophthalic acid  
 derivatives, multicyclic pyrimidinediones and analogs  
 thereof as matrix metalloproteinase inhibitors

INVENTOR(S): Andrianjara, Charles; Ortwine, Daniel Fred; Pavlovsky,  
 Alexander Gregory; Roark, William Howard

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: PCT Int. Appl., 173 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

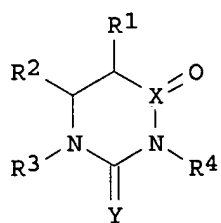
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002064080	A2	20020822	WO 2002-IB447	20020213
WO 2002064080	A3	20021212		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,  
 TJ, TM

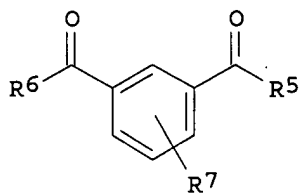
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003078276 A1 20030424 US 2002-75069 20020213

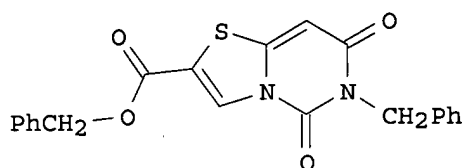
PRIORITY APPLN. INFO.: US 2001-268821P P 20010214



I



II



III

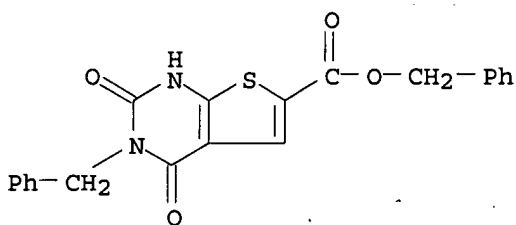
AB Title compds., I [R1 and R2 together may form a substituted arom. ring or a heterocyclic ring; or R2 and R3 together may form substituted heterocycle; or R1, R3, or R4 = alkyl, arylalkyl, etc.; X = C, S; Y = O, N with provision when Y = N it forms a 5-membered heterocycle with R3] and II [R5, R6 = arylalkylamine, heterocyclalkoxy, etc.; R7 = H, MeO, NO2, etc.], are prep'd. and disclosed as matrix metalloproteinase (MMP) inhibitors. Thus, III was prep'd. in five steps via cyclocondensation of diethylmalonate and benzylurea with subsequent chlorination, substitution with hydrosulfide hydrate to form an in situ intermediate that was reacted with bromoacetaldehyde dimethylacetal, followed by acid catalyzed cyclization and substitution with benzylchloroformate. III was demonstrated to inhibit MMP13 with an IC50 value (in .mu.M) of 0.0230. I and II bind allosterically to the catalytic domain of MMP-13 and comprise a hydrophobic group, first and second hydrogen bond acceptors and at least one, and preferably both, of a third hydrogen bond acceptor and a second hydrophobic group. Cartesian coordinates for centroids of the above features are defined in the specification. When the ligand binds to MMP-13, the first, second and third (when present) hydrogen bond acceptors bond resp. with Thr245, Thr247 and Met 253, the first hydrophobic group locates within the S1' channel of MMP-13 and the second hydrophobic group (when present) is relatively open to solvent. The compds. specifically inhibit the matrix metalloproteinase-13 enzyme and thus are useful for treating diseases resulting from tissue breakdown, such as heart disease, multiple sclerosis, arthritis, atherosclerosis, and osteoporosis.

IT 448964-75-8P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (target compd.; prepn. and pharmaceutical activity of substituted isophthalic acid derivs., multicyclic pyrimidinediones and analogs thereof as matrix metalloproteinase inhibitors)

PN 448964-75-8 CAPLUS

CN Thieno[2,3-d]pyrimidine-6-carboxylic acid, 1,2,3,4-tetrahydro-2,4-dioxo-3-(phenylmethyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 9 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:583531 CAPLUS

DOCUMENT NUMBER: 138:313877

TITLE: Design, synthesis and bioactivities of novel diarylthiophenes: inhibitors of tumor necrosis factor-.alpha. (TNF-.alpha.) production

AUTHOR(S): Fujita, Masakazu; Hirayama, Tetsuya; Ikeda, Naoko  
CORPORATE SOURCE: Pharmaceutical Research Laboratories, Nikken Chemicals Co., Ltd., Saitama-shi, Saitama, 330-0835, Japan

SOURCE: Bioorganic &amp; Medicinal Chemistry (2002), 10(10), 3113-3122

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The design, synthesis and SAR of novel diarylthiophene derivs. were performed. These compds. were designed by structural hybridization of TNF-.alpha. prodn. inhibitors bearing 4-fluorophenyl and 4-pyridyl groups such as FR133605, FR167653 and SB210313, and 6-acetyl-3-ethoxycarbonyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine found previously by us. As a result, several compds. were more potent in vitro than FR133605 against TNF-.alpha. prodn. stimulated with lipopolysaccharide.

IT 512786-21-9P

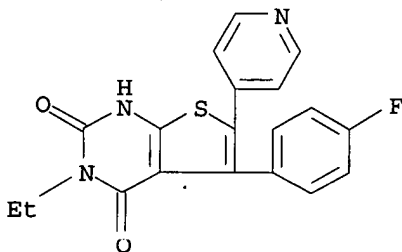
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);

USES (Uses)

(design, synthesis and bioactivities of novel diarylthiophenes as inhibitors of tumor necrosis factor-.alpha. prodn.)

RN 512786-21-9 CAPLUS

CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-ethyl-5-(4-fluorophenyl)-6-(4-pyridinyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:556648 CAPLUS

DOCUMENT NUMBER: 138:147549

TITLE: Enhancement of apomorphine-induced penile erection in

the rat by a selective .alpha.1D-adrenoceptor antagonist

AUTHOR(S): Mizusawa, Hiroya; Hedlund, Petter; Sjunnesson, Johan; Brioni, Jorge D.; Sullivan, James P.; Andersson, Karl-Erik

CORPORATE SOURCE: Department of Clinical Pharmacology, University of Lund, Swed.

SOURCE: British Journal of Pharmacology (2002), 136(5), 701-708  
CODEN: BJPCBM; ISSN: 0007-1188

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

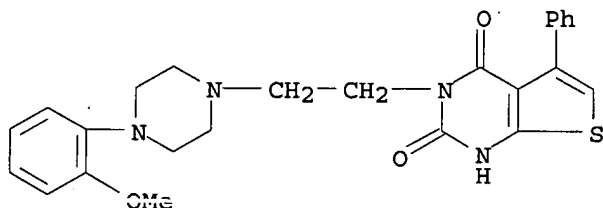
LANGUAGE: English

AB 1 Effects of A-322312 (.alpha.1B-adrenoceptor (AR) antagonist), A-119637 (.alpha.1D-AR antagonist), prazosin (non-selective .alpha.1-AR antagonist), and yohimbine (.alpha.2-AR antagonist) were studied in rat corpus cavernosum (CC) and cavernous artery (Acc) preps. Effects of intracavernous (i.c.) or i.p. administration of .alpha.1-AR antagonists on apomorphine-induced erections were investigated. 2 A-119637 attenuated elec. induced contractions in isolated CC (-logIC50; 8.12+-0.15), and relaxed noradrenaline (NA)-contracted preps. by more than 90% at 10-7 M. At the same concn., the -logEC50 value for NA in Acc was altered from 6.79+-0.07 to 4.86+-0.13. In the CC and Acc, prazosin similarly inhibited contractile responses. 3 Inhibitory effects of A-322312 (10-7 M) in elec. activated CC were 32.3+-5.1%, whereas no effect on concn.-response curves for NA was obsd. in the Acc. Yohimbine (10-8 M and 10-7 M), enhanced elec.-induced contractions in isolated CC by 20 to 50%. At 10-6 M, inhibitory effects of yohimbine were obtained. 4 A-119637 (0.3 .mu.mol kg-1, i.p.) tripled the no. of erections, and produced a 6 fold increase in the duration of apomorphine-induced erectile responses. A-322312, prazosin, or yohimbine did not enhance erections induced by apomorphine. None of the .alpha.1-AR antagonists significantly increased ICP upon i.c. administration. Decreases in blood pressure were seen with A-119637 and prazosin. 5 The present findings show that there is a functional predominance of the .alpha.1D-AR subtype in the rat erectile tissue, and that blockade of this receptor facilitates rat penile erection induced by a suboptimal dose of apomorphine.

IT 255713-47-4, A 119637  
RL: PAC (Pharmacological activity); BIOL (Biological study)  
(enhancement of apomorphine-induced penile erection in the rat by a selective .alpha.1D-adrenoceptor antagonist)

RN 255713-47-4 CAPLUS

CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-5-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 90 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 2002:465844 CAPLUS  
DOCUMENT NUMBER: 137:37675  
TITLE: Medicinal compositions of nonpeptidyl

gonadotropin-releasing hormone agonist or antagonist,  
 process for producing the same and use thereof  
 INVENTOR(S): Suzuki, Hiroshi; Hata, Yoshio  
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan  
 SOURCE: PCT Int. Appl., 93 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002047722	A1	20020620	WO 2001-JP10956	20011214
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002021139	A5	20020624	AU 2002-21139	20011214
JP 2002326960	A2	20021115	JP 2001-380955	20011214
PRIORITY APPLN. INFO.:			JP 2000-382431	A 20001215
			WO 2001-JP10956	W 20011214

OTHER SOURCE(S): MARPAT 137:37675

AB Disclosed are medicinal compns. comprising (i) a nonpeptidyl gonadotropin-releasing hormone agonist or antagonist, (ii) an org. acid or its salt, and (iii) a biodegradable polymer or its salt. These compns. can be efficiently produced, suffer from no trouble in quality control and can achieve a stable releasing speed over a long period of time, even in case where the nonpeptidyl GnRH agonist or antagonist is contained in a large amt. regardless of the soly., m.p. or crystallinity thereof. A compd. 5-(N-benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-methoxy ureide)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4-(1H,3H)-dione was prepd. and dissolved in dichloromethane with 3-hydroxy-2-naphthoic acid and polylactic acid. The soln. was poured in polyvinyl alc. soln., emulsified, and freeze-dried with mannitol to obtain a microsphere. The microsphere showed controlled-release of the compd. when s.c. administered in rats.

IT 308831-61-0P

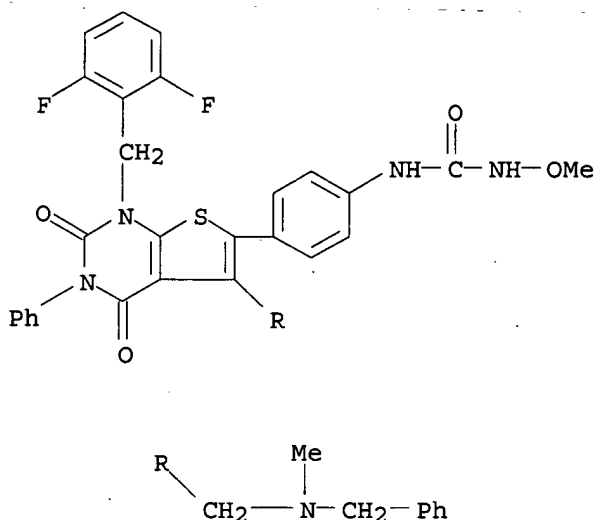
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(medicinal compns. contg. nonpeptidic GnRH agonists or antagonists, org. acids, and biodegradable polymers)

RN 308831-61-0 CAPLUS

CN Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-[[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3-d]pyrimidin-6-yl]phenyl]-N'-methoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:428744 CAPLUS

DOCUMENT NUMBER: 137:10997

TITLE: Medicinal compositions containing water hardly-soluble nonpeptidic GnRH agonists or antagonists, and process for producing the same

INVENTOR(S): Yamagata, Yutaka; Hata, Yoshio

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002043766	A1	20020606	WO 2001-JP10417	20011129
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002018494	A5	20020611	AU 2002-18494	20011129
JP 2003026601	A2	20030129	JP 2001-364107	20011129
PRIORITY APPLN. INFO.:				
			JP 2000-362727	A 20001129
			WO 2001-JP10417	W 20011129

OTHER SOURCE(S): MARPAT 137:10997

AB Disclosed are compns. wherein the release of a nonpeptidic GnRH agonist and antagonist having a particularly low soly. is accelerated, namely, compns. contg. a hardly water-sol. nonpeptidic gonadotropin-releasing hormone agonist or antagonist and an arom. hydroxycarboxylic acid or its salt. A compd. 5-(N-benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-methoxyureide)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4-(1H,3H)-dione was prepd. and dissolved in dichloromethane with salicylic acid.

10/ 075,073

The soln. was poured in polyvinyl alc. soln., emulsified, and freeze-dried with mannitol to obtain a microsphere. The microsphere showed controlled-release of the compd. when s.c. administered in rats.

IT 308831-61-0P

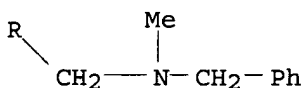
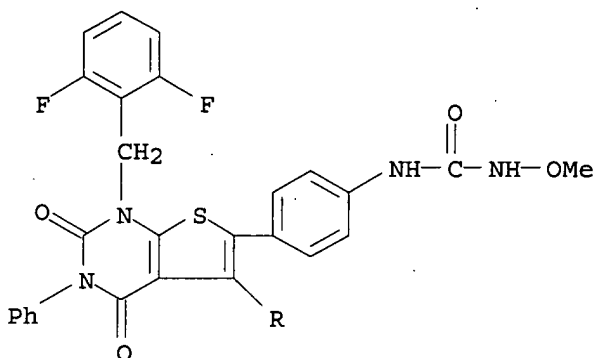
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(medicinal compns. contg. water hardly-sol. nonpeptidic GnRH agonists or antagonists and arom. hydroxycarboxylic acids)

RN 308831-61-0 CAPLUS

CN Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-[[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3-d]pyrimidin-6-yl]phenyl]-N'-methoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 13 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:300762 CAPLUS

DOCUMENT NUMBER: 136:340688

TITLE: Preparation of thienopyrimidinediones as drugs

INVENTOR(S): Ingall, Anthony; Bantick, John; Perry, Matthew

PATENT ASSIGNEE(S): Astrazeneca Ab, Swed.

SOURCE: Brit. UK Pat. Appl., 62 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent

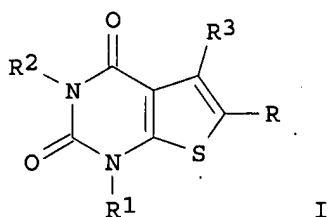
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2363377	A1	20011219	GB 2000-14375	20000614
PRIORITY APPLN. INFO.:			GB 2000-14375	20000614
OTHER SOURCE(S):		MARPAT 136:340688		

GI



AB Title compds. [I; R = (hetero)aryl, (hetero)aryl(hydroxy)alkyl, etc.; R1, R2 = H or alk(en)yl; R3 = ZR10 or (hetero)aryl; R10 = (un)substituted alk(en)yl, cycloalkylcarbonyl, halobenzoyl, etc.; Z = bond or (alkyl)imino] were prepd. Thus, I (R1 = CH2CHMe2, R2 = Me) (II; R = R3 = H) was brominated and the product converted in 2 steps to II [R = CH2C6H4(CF3)-2] (III; R3 = H) which was alkynylated by HC.tplbond.CCMe2OH to give III (R3 = C.tplbond.CCMe2OH). Data for biol. activity of I were given.

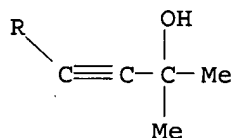
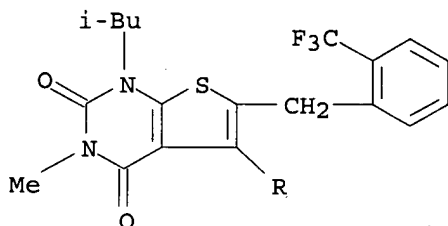
IT 418754-63-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of thienopyrimidinediones as drugs)

RN 418754-63-9 CAPLUS

CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 5-(3-hydroxy-3-methyl-1-butynyl)-3-methyl-1-(2-methylpropyl)-6-[[2-(trifluoromethyl)phenyl]methyl]- (9CI) (CA INDEX NAME)



L8 ANSWER 14 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:240593 CAPLUS

DOCUMENT NUMBER: 136:268181

TITLE: Solid preparations containing a large amount of a physiologically active substance

INVENTOR(S): Nakano, Yoshinori; Yoneyama, Shuji; Ochi, Masashi

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002024230	A1	20020328	WO 2001-JP8264	20010921
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001088102	A5	20020402	AU 2001-88102	20010921
JP 2002167327	A2	20020611	JP 2001-290149	20010921
PRIORITY APPLN. INFO.:			JP 2000-289345	A 20000922
			WO 2001-JP8264	W 20010921

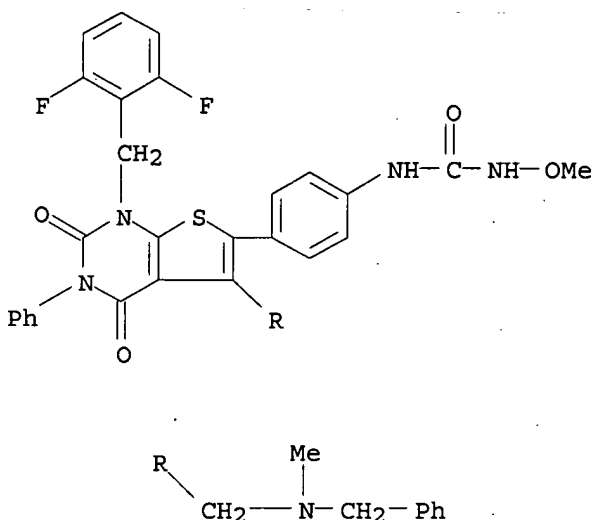
OTHER SOURCE(S): MARPAT 136:268181

AB It is intended to provide granules contg. a large amt. of a physiol. active substance which is hardly sol. in water and highly water-repellent, and solid prepn. contg. these granules which are excellent in the disintegration properties and the elution of the physiol. active substance. Disclosed are (1) granules contg. a physiol. active substance and a cellulose-based disintegrating agent; (2) granules contg. a physiol. active substance, a cellulose-based disintegrating agent and a binder; (3) solid prepn. comprising granules (1) or (2) as described above, a cellulose-based disintegrating agent and a stearic acid-based lubricant; and (4) the solid prepn. (3) as described above which are shaped into ellipsoidal tablets. A tablet was formulated contg. 5-(N-benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-methoxyureido)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4(1H,3H)-dione (prepn. given) 100, lactose 285, starch 50, hydroxypropyl cellulose 20, Ca carmellose 40, 40 and Mg stearate 5 mg. The tablet was coated with a compn. contg. hydroxypropyl Me cellulose 17.8, titania 2, and iron oxide 0.2 mg.

IT **308831-61-0P**, 5-(N-Benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-methoxyureido)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4(1H,3H)-dione  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of phenylthienopyrimidinone derivs. and oral formulations contg. them)

RN 308831-61-0 CAPLUS

CN Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3-d]pyrimidin-6-yl]phenyl]-N'-methoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 15 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:226638 CAPLUS

DOCUMENT NUMBER: 137:136468

TITLE: Modified purine nucleosides as dangling ends of DNA duplexes: the effect of the nucleobase polarizability on stacking interactions

AUTHOR(S): Rosemeyer, Helmut; Seela, Frank

CORPORATE SOURCE: Laboratorium fuer Organische und Bioorganische Chemie, Institut fuer Chemie, Fachbereich Biologie/Chemie, Universitaet Osnabrueck, Osnabruck, D-49069, Germany

SOURCE: Journal of the Chemical Society, Perkin Transactions 2 (2002), (4), 746-750

CODEN: JCSPGI; ISSN: 1472-779X

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Base-modified nucleotide residues have been appended to the 5'-terminus of the self-complementary oligo-2'-deoxynucleotide duplex [5'-d(CGCGCG)]<sub>2</sub> as dangling ends. Temp.-dependent UV measurements on the resulting oligomers indicate generally higher thermal stabilities (T<sub>m</sub>) compared to that without an overhanging end. The duplex stabilization (ΔT<sub>m</sub>) was correlated with the mol. polarizability (α<sub>m</sub>) of the base of the pendant nucleoside showing that: the higher the mol. polarizability α<sub>m</sub> of a dangling nucleobase, the higher the thermal stability of the DNA duplex.

IT 96022-82-1

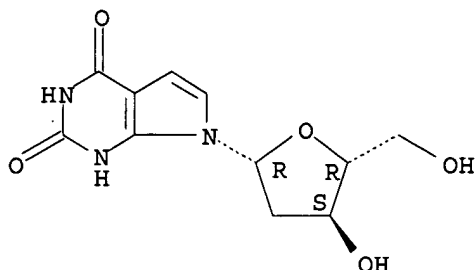
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(modified purine nucleosides as dangling ends of DNA duplexes, the effect of the nucleobase polarizability on stacking interactions)

RN 96022-82-1 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 7-(2-deoxy-β-D-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 16 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:172492 CAPLUS

DOCUMENT NUMBER: 136:232165

TITLE: Preparation of xanthine derivatives and analogs as cell signaling inhibitors

INVENTOR(S): Klein, J. Peter; Klaus, Stephen J.; Kumar, Anil M.; Gong, Baoqing

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 143 pp., Cont.-in-part of U. S. Ser. No. 8,020, abandoned.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

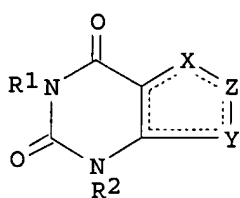
FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

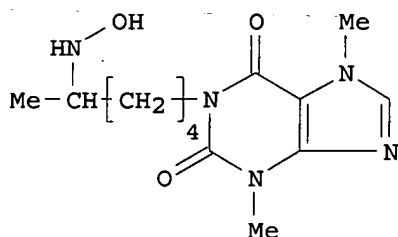
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002028823	A1	20020307	US 1999-288556	19990409
US 6469017	B1	20021022	US 1998-8020	19980116
WO 2000061583	A1	20001019	WO 2000-US9139	20000407
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1171442	A1	20020116	EP 2000-921774	20000407
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002541258	T2	20021203	JP 2000-610854	20000407
PRIORITY APPLN. INFO.: US 1998-8020 B2 19980116				
US 1995-483871 A2 19950607				
US 1995-486264 A2 19950607				
US 1999-288556 A2 19990409				
WO 2000-US9139 W 20000407				

OTHER SOURCE(S): MARPAT 136:232165

GI



I



II

AB Therapeutic compds. I [R1 = H, Me, (un)substituted C5-9-alkyl, C5-9-alkenyl, C5-9-alkynyl, C3-8-hydroxyalkyl, C3-8-alkoxy, C5-9-alkoxyalkyl; R2, R3 = H, halo, oxo, (un)substituted C1-20-alkyl, C1-20-hydroxyalkyl, C(1-20)thioalkyl, C1-20-alkylamino, C1-20-alkylaminoalkyl, C1-20-aminoalkyl, C1-20-aminoalkoxyalkenyl, C1-20-aminoalkoxyalkynyl, C1-20-diaminoalkyl, C1-20-triaminoalkyl, C1-20-tetraaminoalkyl, C5-15-aminotrialkoxyamino, C1-20-alkylamido, C1-20-alkylamidoalkyl, C1-20-amidoalkyl, C1-20-acetamidoalkyl, C1-20-alkenyl, C1-20-alkynyl, C3-8-alkoxyl, C1-11-alkoxyalkyl, and C1-20-dialkoxyalkyl; with the proviso that R1 .noteq. .omega.-1 secondary alc. substituted C5-8-alkyl; X, Y = NR3, R3 = C1-3-alkyl; Z = CR3, R3 = C1-3-alkyl; dashed lines are single or double bonds] pharmaceutically acceptable derivs. (e.g., resolved enantiomers, diastereomers, tautomers, salts and solvates thereof) or prodrugs thereof are described. Thus, CT 7549 (II) was prepd. via redn of 1-(5-oximinohexyl)-3,7-dimethylxanthine using sodium cyanoborohydride in methanol. These novel heterocyclic compds. I having a six membered ring structure fused to a five membered ring structure are found to be useful for the treatment and prevention of symptoms or manifestations assocd. with disorders affected by Interleukin-12 ("IL-12") intracellular signaling, such as, for example, Th1 cell-mediated disorders.

IT 301536-59-4P, CT 12458

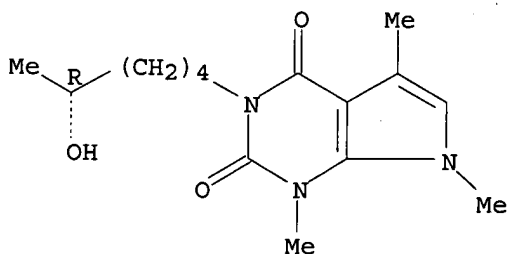
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of xanthine derivs. and analogs as cell signaling inhibitors)

RN 301536-59-4 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[(5R)-5-hydroxyhexyl]-1,5,7-trimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L8 ANSWER 17 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:31283 CAPLUS

DOCUMENT NUMBER: 136:107510

TITLE: Medicinal preparations for treating sex hormone-dependent diseases

INVENTOR(S): Igari, Yasutaka; Kamei, Shigeru

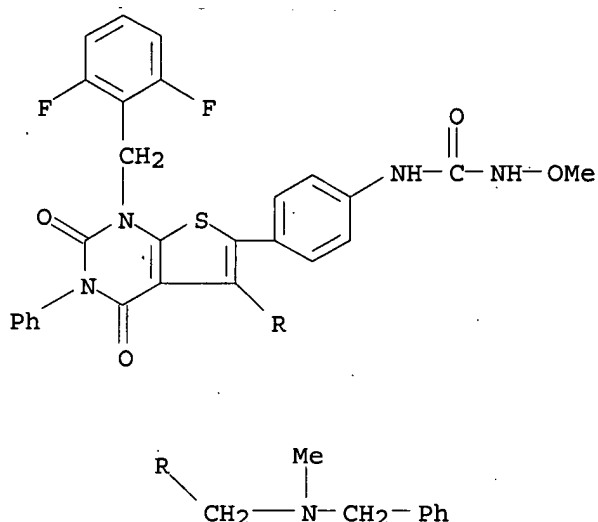
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002002144	A1	20020110	WO 2001-JP5808	20010704
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 2001069439	A5	20020114	AU 2001-69439	20010704
JP 2002080397	A2	20020319	JP 2001-203722	20010704
EP 1297850	A1	20030402	EP 2001-947821	20010704
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			

OTHER SOURCE(S) :                    MARPAT 136:107510

IT **308831-61-0**, 5-(N-Benzyl-N-methyl-aminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-methoxyureido)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4(1H,3H)dione  
 RL: THU (Therapeutic use); **BIOL (Biological study)**; USES (Uses)  
 (use of LHRH agonists and antagonists for intermittent treatment of sex hormone-dependent diseases)

CN Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3-d]pyrimidin-6-yl]phenyl)-N'-methoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 18 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:2173 CAPLUS

DOCUMENT NUMBER: 136:272783

TITLE: Anti-angiogenic activity of a novel multi-substrate analogue inhibitor of thymidine phosphorylase

AUTHOR(S): Liekens, Sandra; Bilsen, Filip; De Clercq, Erik; Priego, Eva Maria; Camarasa, Maria-Jose; Perez-Perez, Maria-Jesus; Balzarini, Jan

CORPORATE SOURCE: Rega Institute for Medical Research, Katholieke Universiteit Leuven, Louvain, B-3000, Belg.

SOURCE: FEBS Letters (2002), 510(1,2), 83-88

CODEN: FEBLAL; ISSN: 0014-5793

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 7-Deazaxanthine (7-DX) was recently identified as the first purine deriv. with pronounced inhibitory activity against Escherichia coli thymidine phosphorylase (TP) and angiogenesis. In order to 'freeze' the enzyme in an open, inactive conformation, a novel multi-substrate analog inhibitor of TP, contg. an alkyl phosphonate moiety covalently linked to 7-DX, was synthesized. The prototype compd. TP65 (9-(8-phosphonooctyl)-7-deazaxanthine) (at 250 .mu.M) completely inhibited TP-induced formation of microvascular sprouts from endothelial cell aggregates in a three-dimensional fibrin gel. In the chick chorioallantoic membrane assay, TP caused a dose-dependent stimulation of angiogenesis, which was completely inhibited by 250 nmol TP65. This dose proved to be non-toxic for the developing chick embryo. TP65 thus emerges as a potent and specific inhibitor of TP and TP-induced angiogenesis, which opens new perspectives for multi-substrate analog inhibitors of TP as potential anti-cancer agents and as inhibitors of angiogenesis and of diseases with enhanced expression of TP.

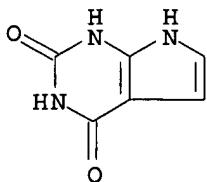
IT 39929-79-8, 7-Deazaxanthine

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses).

(antiangiogenic activity of a novel multi-substrate analog inhibitor of thymidine phosphorylase)

RN 39929-79-8 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione (9CI) (CA INDEX NAME)



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 19 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:923639 CAPLUS

DOCUMENT NUMBER: 136:58811

TITLE: Biodegradable polymers for sustained-release compositions

INVENTOR(S): Hata, Yoshio; Yamagata, Yutaka; Igari, Yasutaka

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., USA

SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

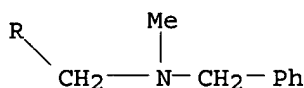
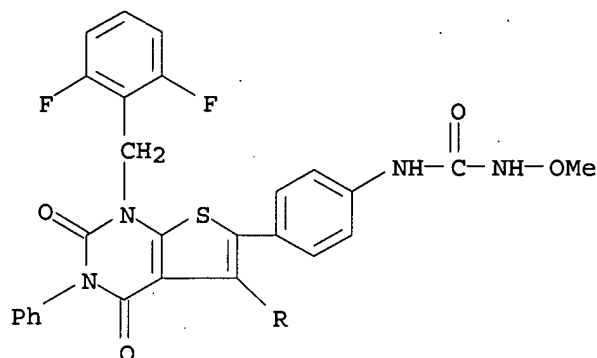
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001095940	A1	20011220	WO 2001-JP5009	20010613
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001064264	A5	20011224	AU 2001-64264	20010613
EP 1291023	A1	20030312	EP 2001-938630	20010613
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2002068982	A2	20020308	JP 2001-180061	20010614
PRIORITY APPLN. INFO.: JP 2000-178534 A 20000614				
WO 2001-JP5009 W 20010613				
AB Disclosed are compns. contg. a nonpeptidyl physiol. active substance and a biodegradable polymer having two or more terminal carboxyl groups or its salt which have the following characteristics: (1) the content of the nonpeptidyl physiol. active substance can be elevated and the release thereof can be regulated or accelerated to thereby ensure the achievement of the pharmacol. effect; (2) in case where the nonpeptidyl physiol. active substance has s.c. irritation, it is expected that the irritation can be overcome by the terminal groups having a high acidity; and (3) having a high glass transition point and thus being highly stable. 5-(N-Benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-methoxyureido)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4(1H,3H)-dione was prep'd. and formulated with tartronic acid-terminated polylactic acid to give microcapsules.				
IT 308831-61-0P				
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)				
(prepn. of thienopyrimidines and formulation with carboxy-terminated				

polymers for sustained release)

RN 308831-61-0 CAPLUS

CN Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-  
[[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3-  
d]pyrimidin-6-yl]phenyl]-N'-methoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 20 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:904177 CAPLUS

DOCUMENT NUMBER: 136:37621

TITLE: Preparation of 6-phenylpyrrolopyrimidinedione  
derivativesINVENTOR(S): Vidal Juan, Bernat; Gracia Ferrer, Jordi; Prieto Soto,  
Jose Manuel; Vega Noverola, Armando

PATENT ASSIGNEE(S): Almirall Prodesfarma S.A., Spain

SOURCE: PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

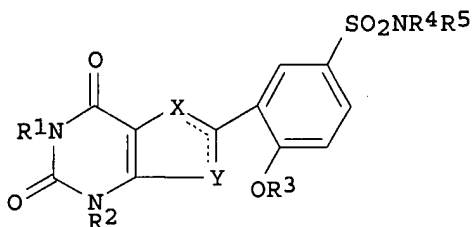
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001094350	A1	20011213	WO 2001-EP6306	20010601
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1286997	A1	20030305	EP 2001-960264	20010601
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: ES 2000-1436 A 20000607

WO 2001-EP6306 W 20010601

OTHER SOURCE(S): MARPAT 136:37621

GI



I

AB 6-Phenylpyrrolopyrimidine derivs. I [-X-C-Y- represents NHC:CR6 or -X-C-Y- represents CR6:CNH], useful as selective cyclic GMP specific phosphodiesterase (PDE 5) inhibitors, were prepd. E.g., I [R1 = Me; R2 = Pr; R3 = Et; Y = CH.; X = NH; NR4R5 = 4-methylpiperazinyl] was prepd.

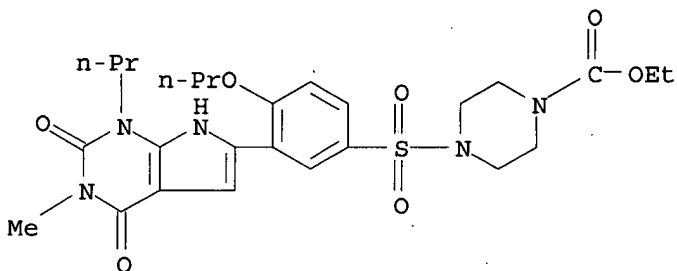
IT 378794-79-7P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 6-phenylpyrrolopyrimidinedione derivs. as cyclic GMP specific phosphodiesterase (PDE 5) inhibitors)

RN 378794-79-7 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[[[4-propoxy-3-(2,3,4,7-tetrahydro-3-methyl-2,4-dioxo-1-propyl-1H-pyrrolo[2,3-d]pyrimidin-6-yl)phenyl]sulfonyl]-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 21 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:816672 CAPLUS

DOCUMENT NUMBER: 135:357940

TITLE: Preparation of thieno[2,3-d]pyrimidinediones for treating obstructive airways disease

INVENTOR(S): Bantick, John; Ingall, Anthony; Perry, Matthew; Reynolds, Rachel

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.

SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001083489	A1	20011108	WO 2001-SE907	20010426

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

GB 2361917 A1 20011107 GB 2000-10657 20000504

EP 1280806 A1 20030205 EP 2001-926294 20010426

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.:

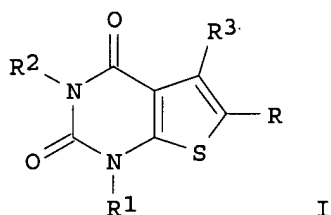
GB 2000-10657 A 20000504

GB 2000-17795 A 20000721

WO 2001-SE907 W 20010426

OTHER SOURCE(S): MARPAT 135:357940

GI



AB The title compds. [I; R = COAr1, CR4R5Ar1, Ar3; Ar1 = (un)substituted 5-10 membered arom. ring system wherein up to 3 ring atoms may be heteroatoms independently selected from N, O, and S; R1, R2 = H, alkyl, alkenyl, CH2(cycloalkyl), cycloalkyl; R3 = XAr2; X = SOn, CO, CH(OH); n = 0-2; Ar2 = (un)substituted 5-6 membered arom. ring wherein up to 4 ring atoms may be heteroatoms selected from N, O, and S; R4 = H, alkyl; R5 = H, OH; Ar3 = (un)substituted acenaphthenyl, indanyl, fluorenyl; with the proviso that when X = SOn, then Ar2 does not represent pyridyl or thienyl], useful as immunosuppressants for the treatment of asthma, chronic obstructive pulmonary disease, and allograft rejection, were prepd. E.g. a 3-step synthesis of I [R = 2-F3CC6H4CH2; R1 = iso-Bu; R2 = Me; R3 = 3-furyl(hydroxy)methyl] was described. In a PMA/ionomycin-stimulated peripheral blood mononuclear cell proliferation assay, some of the compds. I exhibited IA50 of < 1x10<sup>-6</sup> M.

IT 372162-25-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation);

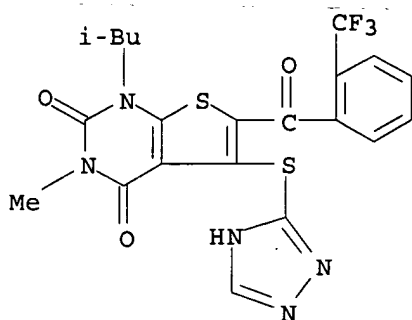
BIOL (Biological study); BIOL (Biological study); PREP

(Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of thieno[2,3-d]pyrimidinediones for treating obstructive airways disease)

RN 372162-25-9 CAPLUS

CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-methyl-1-(2-methylpropyl)-5-(1H-1,2,4-triazol-3-ylthio)-6-[2-(trifluoromethyl)benzoyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 22 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:793414 CAPLUS

DOCUMENT NUMBER: 135:348864

TITLE: Poly(ADP-ribose) polymerase inhibitors

INVENTOR(S): Ono, Yukihiro; Otani, Kenichi; Aino, Hiroshi; Saji, Ikutaro

PATENT ASSIGNEE(S): Sumitomo Pharmaceuticals Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001302515	A2	20011031	JP 2000-116579	20000418
PRIORITY APPLN. INFO.:			JP 2000-116579	20000418

OTHER SOURCE(S): MARPAT 135:348864

AB Quinazolines, indoles, and pyrrolopyrimidines are claimed as poly(ADP-ribose) polymerase (PARP) inhibitors for the treatment of various diseases including cerebral, nervous system, gastrointestinal, and eye diseases. 1-Methyl-2,4(1H,3H)-quinazolinedione, 1-(cyclopropylmethyl)-2,4(1H,3H)-quinazolinedione, 4-methyl-2(1H)-quinazolinone, 1-ethyl-1H-pyrrolo[2,3-d]-pyrimidine-2,4(3H,7H)dione, and 1-ethyl-6,7-dihydro-1H-pyrrolo[2,3-d]-pyrimidine-2,4(3H,5H)dione were in vitro tested for inhibitory activities of PARP.

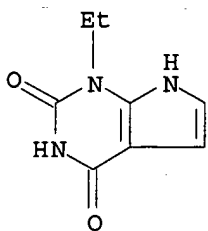
IT 53680-91-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(poly(ADP-ribose) polymerase inhibitors for treatment of various diseases)

RN 53680-91-4 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 1-ethyl- (9CI) (CA INDEX NAME)



L8 ANSWER 23 OF 90 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 2001:781118 CAPLUS  
 DOCUMENT NUMBER: 135:339291  
 TITLE: Triplex-forming oligonucleotides inhibiting ICAM-1  
 gene expression and their therapeutic use  
 INVENTOR(S): Degitz, Klaus Karl; Besch, Robert  
 PATENT ASSIGNEE(S): Germany  
 SOURCE: PCT Int. Appl., 61 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001079487	A2	20011025	WO 2001-DE1509	20010418
WO 2001079487	A3	20020620		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,  
 HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,  
 LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,  
 RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,  
 VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

DE 10019252	A1	20011031	DE 2000-10019252	20000418
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PRIORITY APPLN. INFO.: DE 2000-10019252 A 20000418

AB The invention relates to triple helix-forming oligonucleotides which become attached to double-stranded genomic ICAM-1 DNA sequences and thus inhibit transcription. The invention also relates to these oligonucleotides as therapeutic agents in the therapy or prophylaxis of ICAM-1-assocd. diseases. Thus, ICAM-1 gene expression in human A431 keratinocyte cells was inhibited by GGTTTGTGTGTGGGT and, more efficiently, by 3-methoxypsoralen-GTTGGTGGGTGGGGG conjugate and irradiation with UV light.

IT 39929-79-8, 7-Deazaxanthine

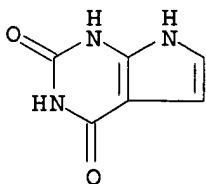
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);

BIOL (Biological study); OCCU (Occurrence)

(oligonucleotides contg.; triplex-forming oligonucleotides inhibiting ICAM-1 gene expression and their therapeutic use)

RN 39929-79-8 CAPLUS

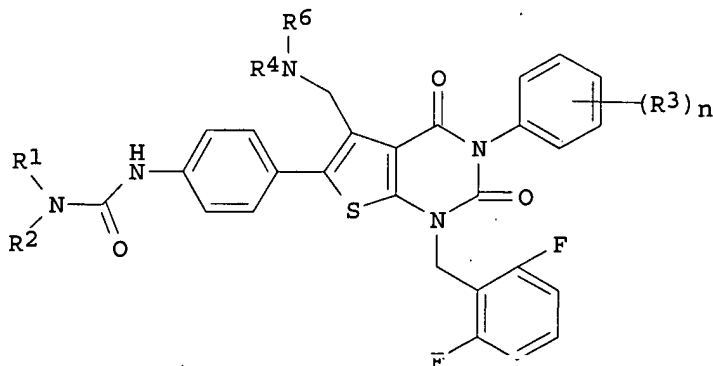
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione (9CI) (CA INDEX NAME)



L8 ANSWER 24 OF 90 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 2001:780733 CAPLUS  
 DOCUMENT NUMBER: 135:313627  
 TITLE: Preventives/remedies for Alzheimer's disease  
 INVENTOR(S): Furuya, Shuichi; Suzuki, Nobuhiro  
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan  
 SOURCE: PCT Int. Appl., 80 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001078780	A1	20011025	WO 2001-JP3189	20010413
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
JP 2001354588	A2	20011225	JP 2001-115804	20010413
PRIORITY APPLN. INFO.:			JP 2000-112046	A 20000413

GI



I

AB Preventives/remedies for Alzheimer's disease contg. a compd. having GnRH antagonism have excellent effects of preventing and treating Alzheimer's disease with little toxicity. As the compd. having GnRH antagonism, compds. represented by the structural formula (I) may be cited.

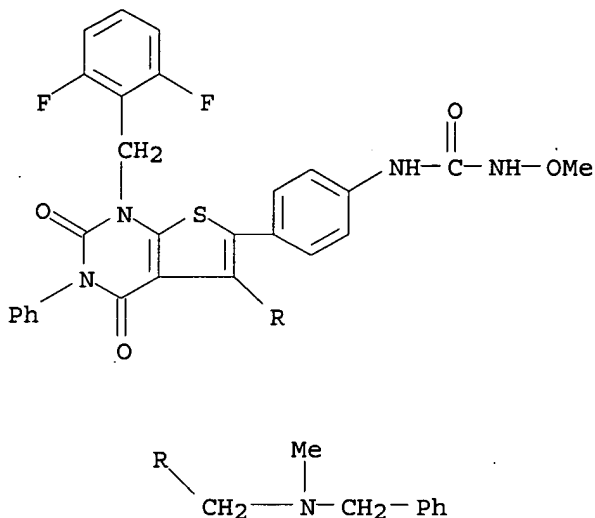
IT 308831-61-ODP, salts

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);  
**BIOL (Biological study)**; PREP (Preparation); USES (Uses)  
 (preventives/remedies for Alzheimer's disease)

RN 308831-61-0 CAPLUS

CN Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-  
 [[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3-  
 d]pyrimidin-6-yl]phenyl]-N'-methoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 25 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:444501 CAPLUS

DOCUMENT NUMBER: 135:56063

TITLE: Sulfonamide derivatives as matrix metalloproteinase  
 inhibitors

INVENTOR(S): Kimura, Tomio; Miyazaki, Shojiro; Ueda, Keishi;  
 Tanzawa, Kazuhiko; Ushiyama, Shigeru; Takasaki, Wataru

PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 120 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

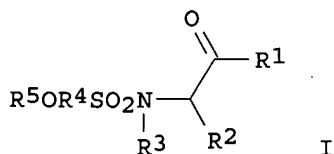
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001163786	A2	20010619	JP 2000-297744	20000929
PRIORITY APPLN. INFO.:			JP 1999-278300	A 19990930
OTHER SOURCE(S):			MARPAT 135:56063	

GI



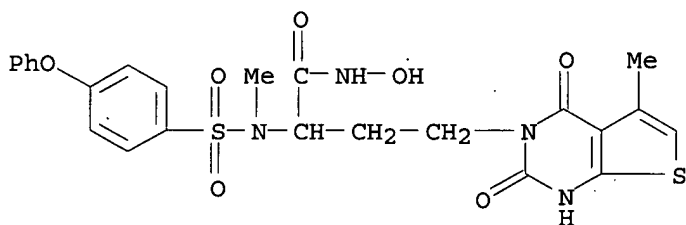
AB The sulfonamide derivs. (I; -R1 = H, NHOH; R2 = H, (substituted)alkyl, cycloalkyl, -AR6 [A = O, -S(O)m- or -n(R9)- with alkylene; R6 = other groups]; R3 = H, (substituted)-alkyl, -cycloalkyl, -alkenyl, and -alkynyl; R4 = (substituted) (hetero)arylene; R5 = (substituted)-alkyl and -(hetero)aryl) and their pharmacol. acceptable salts are claimed as matrix metalloproteinase inhibitors for treatment of arthritis, rheumatoid arthritis, cancer metastasis, and breast cancer.

IT 246263-34-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(sulfonamide derivs. as matrix metalloproteinase inhibitors)

RN 246263-34-3 CAPLUS

CN Thieno[2,3-d]pyrimidine-3(2H)-butanamide, 1,4-dihydro-N-hydroxy-5-methyl-.alpha.-[methyl[(4-phenoxyphenyl)sulfonyl]amino]-2,4-dioxo- (9CI) (CA INDEX NAME)



L8 ANSWER 26 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:334737 CAPLUS

DOCUMENT NUMBER: 135:107300

TITLE: Structure-Activity Studies for a Novel Series of Bicyclic Substituted Hexahydrobenz[e]isoindole .alpha.1A Adrenoceptor Antagonists as Potential Agents for the Symptomatic Treatment of Benign Prostatic Hyperplasia

AUTHOR(S): Meyer, Michael D.; Altenbach, Robert J.; Bai, Hao; Basha, Fatima Z.; Carroll, William A.; Kerwin, James F., Jr.; Lebold, Suzanne A.; Lee, Edmund; Pratt, John K.; Sippy, Kevin B.; Tietje, Karin; Wendt, Michael D.; Brune, Michael E.; Buckner, Steven A.; Hancock, Arthur A.; Drizin, Irene

CORPORATE SOURCE: Neurological and Urological Diseases Research  
Pharmaceutical Products Division, Abbott Laboratories,  
Abbott Park, IL, 60064, USA

SOURCE: Journal of Medicinal Chemistry (2001), 44(12),  
1971-1985

CODEN: JMCMAR; ISSN: 0022-2623

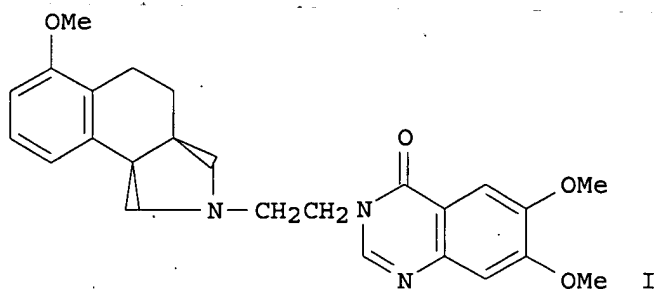
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 135:107300

GI



AB In search of a uroselective  $\alpha_1A$  subtype selective antagonist, a novel series of 6-methoxyhexahydrobenz[e]isoindoles attached to a bicyclic heterocyclic moiety via a two-carbon linker was synthesized. It was found that in contrast to a previously described series of tricyclic heterocycles, this bicyclic series has very specific requirements for the heterocyclic attachments. The most important structural features contributing to the  $\alpha_1A/\alpha_1B$  selectivity of these compds. were identified. In vitro functional assays for the  $\alpha_1$  adrenoceptor subtypes were used to further characterize the most selective compds., and in vivo models of vascular vs prostatic tone were used to assess uroselectivity. The quinazolinone I showed the highest degree of selectivity in the radioligand binding assays (56-fold), in the in vitro functional tests (80-fold), and for in vivo prostate selectivity (960-fold).

IT 179240-03-0P

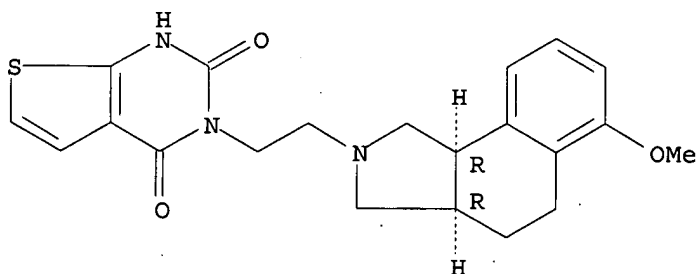
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); **BIOL (Biological study)**; **BIOL (Biological study)**; PREP (Preparation); RACT (Reactant or reagent)

(prepn. and structure-activity studies of bicyclic-substituted hexahydrobenz[e]isoindole  $\alpha_1A$  adrenoceptor antagonists)

RN 179240-03-0 CAPLUS

CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[(3aR,9bR)-1,3,3a,4,5,9b-hexahydro-6-methoxy-2H-benz[e]isoindol-2-yl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 27 OF 90 CAPLUS COPYRIGHT 2003 ACS

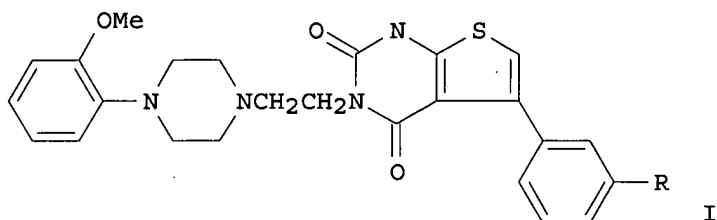
ACCESSION NUMBER: 2001:321149 CAPLUS

DOCUMENT NUMBER: 135:137465

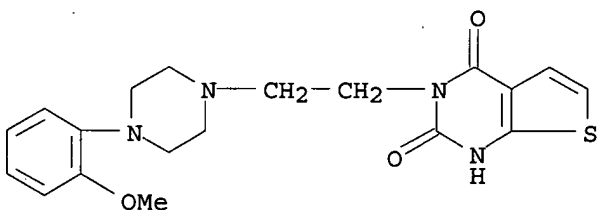
TITLE: Two Novel and Potent 3-[(o-Methoxyphenyl)piperazinylethyl]-5-phenylthieno[2,3-d]pyrimidine-2,4-diones Selective for the  $\alpha_1D$  Receptor

10/ 075,073

AUTHOR(S): Carroll, W. A.; Sippy, K. B.; Esbenshade, T. A.;  
Buckner, S. A.; Hancock, A. A.; Meyer, M. D.  
CORPORATE SOURCE: Neurological and Urological Diseases Research, Abbott  
Laboratories, Abbott Park, IL, 60064-6101, USA  
SOURCE: Bioorganic & Medicinal Chemistry Letters (2001),  
11(9), 1119-1121  
CODEN: BMCLE8; ISSN: 0960-894X  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 135:137465  
GI



AB The synthesis and in vitro characterization of A-119637 (I, R = H) and  
A-123189 (I, R = Me), two novel, selective and potent .alpha.1D  
antagonists, are described.  
IT 110164-21-1P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); SPN (Synthetic preparation); BIOL (Biological  
study); PREP (Preparation)  
(prepn. and binding to .alpha.1D receptor)  
RN 110164-21-1 CAPLUS  
CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-  
piperazinyl]ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 28 OF 90 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 2001:247319 CAPLUS  
DOCUMENT NUMBER: 134:266102  
TITLE: Preparation of phenylsulfonamide derivatives as matrix  
metalloproteinase 13 and aggrecanase inhibitors  
INVENTOR(S): Kimura, Tomio; Tamaki, Kazuhiko; Miyazaki, Shoujiro;  
Kurakata, Shinichi; Fujiwara, Kosaku  
PATENT ASSIGNEE(S): Sankyo Company, Limited, Japan  
SOURCE: PCT Int. Appl., 251 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese

10/ 075,073

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001023363	A1	20010405	WO 2000-JP6798	20000929
W: AU, BR, CA, CN, CZ, HU, ID, IL, IN, KR, MX, NO, NZ, PL, RU, TR, US, ZA				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 2001163885	A2	20010619	JP 2000-297743	20000929
PRIORITY APPLN. INFO.:		JP 1999-275857 A 19990929		
OTHER SOURCE(S):		MARPAT 134:266102		
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

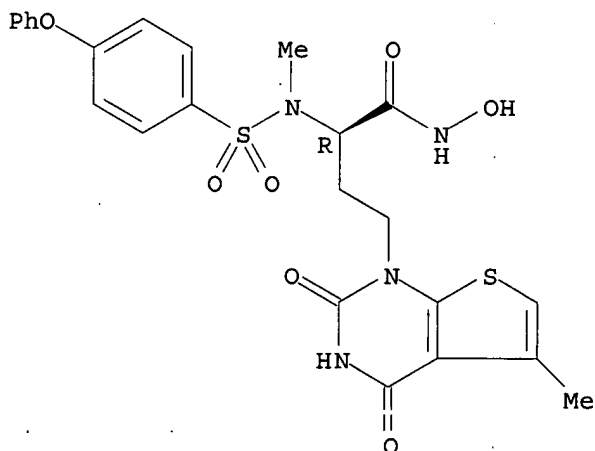
AB Title compds. [R4MLS02NR3CH(AR2)COR1; wherein R1 is OH or NHOH; R2 = Q, Q1; A is alkylene which may be interrupted by an ether linkage or the like; R3 is hydrogen, alkyl, or the like; L is optionally substituted (hetero)arylene; M is oxygen or sulfur; and R4 is optionally substituted alkyl, (hetero)aryl, or the like] and pharmaceutically acceptable salts, exhibiting inhibitory activities against matrix metalloproteinase 13 and aggrecanase, are prepd. Thus, the title compd. I was prepd. and tested.

IT 332096-46-5P  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of phenylsulfonamide derivs. as matrix metalloproteinase 13 and aggrecanase inhibitors)

RN 332096-46-5 CAPLUS

CN Thieno[2,3-d]pyrimidine-1(2H)-butanamide, 3,4-dihydro-N-hydroxy-5-methyl-.alpha.-[methyl[(4-phenoxyphenyl)sulfonyl]amino]-2,4-dioxo-, (.alpha.R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 29 OF 90 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 2001:241744 CAPLUS  
DOCUMENT NUMBER: 134:252587

TITLE: Preparation of desazapurine-nucleotides and the use thereof for nucleic acid sequencing and as antiviral agents

INVENTOR(S): Seela, Frank; Muth, Heinz-Peter; Kaiser, Klaus; Bourgeois, Werner; Muhlegger, Klaus; Von Der Eltz, Herbert; Batz, Hans-Georg

PATENT ASSIGNEE(S): Roche Diagnostics G.m.b.H., Germany

SOURCE: U.S., 15 pp., Cont.-in-part of U.S. Ser. No. 179,862, abandoned.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

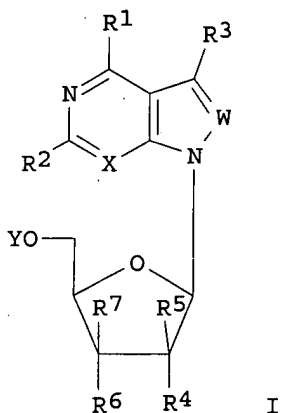
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6211158	B1	20010403	US 1992-908513	19920626
DE 3739366	A1	19881027	DE 1987-3739366	19871120
ZA 8802446	A	19881228	ZA 1988-2446	19880408
DD 269854	A5	19890712	DD 1988-314564	19880408

PRIORITY APPLN. INFO.: DE 1987-3712280 A 19870410  
DE 1987-3739366 A 19871120  
US 1988-179862 B2 19880411

OTHER SOURCE(S): MARPAT 134:252587  
GI



AB The present invention provides desazapurine-nucleoside derivs. of the general formula I; wherein X is a nitrogen atom or a methine radical, W is a nitrogen atom or a C-R4 radical, R1-R4, which can be the same or different, are hydrogen or halogen atoms, hydroxyl or mercapto groups, lower alkyl, lower alkylthio, lower alkoxy, aralkyl, aralkoxy or aryloxy radicals or amino groups optionally substituted once or twice, R5 is a hydrogen atom or a hydroxyl group, R6 and R7 are each hydrogen atoms or one of them is a halogen atom or a cyano or azido group or an amino group optionally substituted once or twice, whereby one of R6 and R7 can also be a hydroxyl group when X is a methine radical and, in addn., R5 and R7 can together also represent a further valency bond between C-2' and C-3' and Y is a hydrogen atom or a mono-, di- or tri-phosphate group and the use thereof for nucleic acid sequencing and as antiviral agents. Thus, 2-amino-7-deaza-2',3'-dideoxy-9-.beta.-D-ribofuranosyl-purine-6-one was prepd. and used for nucleic acid sequencing and as antiviral agents.

10/ 075,073

Compds. I according to the present invention can also be advantageously used for DNA-sequencing according to Sanger's method. The sequencing of d(G-C)-rich DNA fragments is, in particular, made difficult by the formation of secondary structures which lead to a band compression in the region of d(G-C) clusters.

IT 120552-11-6P

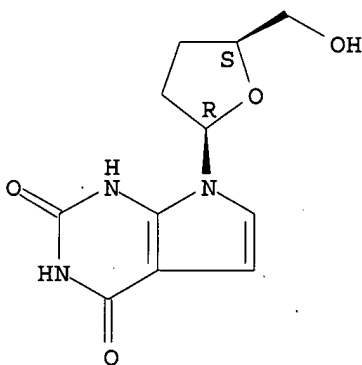
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of desazapurine-nucleotides and the use thereof for nucleic acid sequencing and as antiviral agents)

RN 120552-11-6 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 7-[(2R,5S)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 30 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:909212 CAPLUS

DOCUMENT NUMBER: 134:56691

TITLE: Preparation of piperazinyl thienopyrimidine diones as selective .alpha.-1D adrenoceptor antagonists

INVENTOR(S): Meyer, Michael D.; Carroll, William A.

PATENT ASSIGNEE(S): Abbott Laboratories, USA.

SOURCE: U.S., 16 pp.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

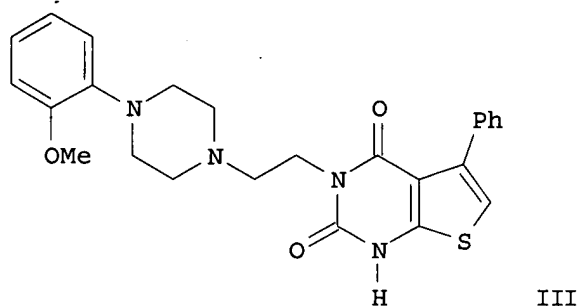
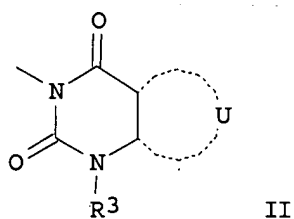
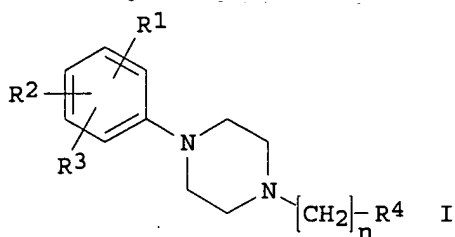
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6166019	A	20001226	US 1999-351090	19990709
PRIORITY APPLN. INFO.:			US 1998-92988P	P 19980716
OTHER SOURCE(S):		MARPAT 134:56691		

GI



AB The title compds. [I; R1-R3 = halo, OH, NO2, etc.; n = 2-10; R4 = II (wherein U, taken together with the carbon atoms to which it is attached forms thieno ring, etc.)] and their pharmaceutically acceptable salts, which are selective  $\alpha$ -1D adrenoceptor antagonists and may be useful for treating disease states such as hypertension, were prepd. E.g., a 3-step synthesis of III as methanesulfonate salt which showed  $K_i$  of 0.213 nM against  $\alpha$ -1D binding, was given.

IT 255713-48-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of piperazinyl thienopyrimidine diones as selective  $\alpha$ -1D adrenoceptor antagonists)

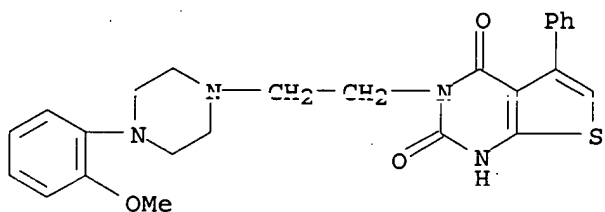
RN 255713-48-5 CAPLUS

CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-5-phenyl-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 255713-47-4

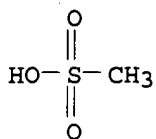
CMF C25 H26 N4 O3 S



CM 2

10/ 075,073

CRN 75-75-2  
CMF C H4 O3 S



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 31 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:864913 CAPLUS

DOCUMENT NUMBER: 134:4946

TITLE: Thienopyrimidines, their production and use as gonadotropin releasing hormone antagonists

INVENTOR(S): Furuya, Shuichi; Suzuki, Nobuhiro; Choh, Nobuo; Nara, Yoshi

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 89 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000056739	A1	20000928	WO 2000-JP1777	20000323
W:				
AE, AG, AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CR, CU, CZ, DM, DZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MA, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:				
GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
JP 2001278884	A2	20011010	JP 2000-87051	20000323
JP 3240293	B2	20011217		
JP 2001278885	A2	20011010	JP 2000-120277	20000323
BR 2000009297	A	20011218	BR 2000-9297	20000323
EP 1163244	A1	20011219	EP 2000-911308	20000323
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6297379	B1	20011002	US 2000-530495	20000426
US 6340686	B1	20020122	US 2000-571215	20000516
NO 2001004603	A	20011126	NO 2001-4603	20010921
PRIORITY APPLN. INFO.:			JP 1999-79371	A 19990324
			JP 2000-18019	A 20000125
			JP 2000-87051	A3 20000323
			WO 2000-JP1777	W 20000323
			US 2000-530495	A1 20000426
OTHER SOURCE(S):		MARPAT 134:4946		
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

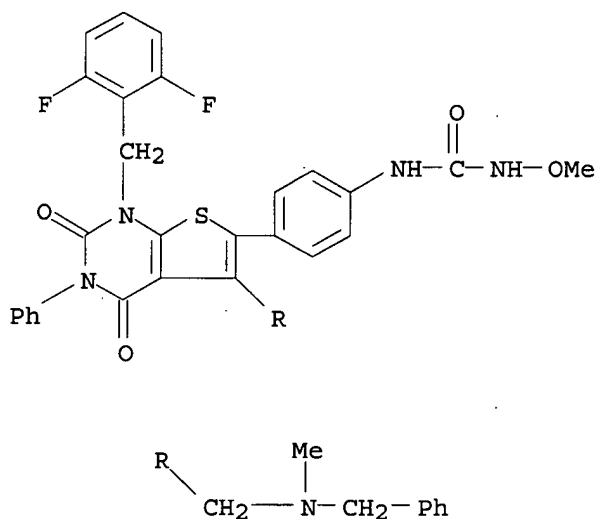
AB Methods for prepn. of thienopyrimidines I (R1, R2 = H, OH, (un)substituted C1-4 alkoxy, C1-4 alkoxy-carbonyl or C1-4 alkyl; R3 = H, halo, OH or (un)substituted C1-4 alkoxy, n = 0-5; if n = 2 then two adjacent R3 may form C1-4 alkylenedioxy; R4 = H or C1-4 alkyl; R6 = (un)substituted C1-4 alkyl or a group of the formula Q wherein R5 is hydrogen or R4 and R5 may form heterocycle); or a pharmaceutically acceptable salt thereof, having excellent GnRH-antagonizing activity, were disclosed, as well as pharmaceutical compns. for treating sex hormone-dependent diseases. Thus, compd. II [R7 = MeONHCONH (III)] was prepd. by reacting the starting amine II (R7 = NH2) with N,N'-carbonyldiimidazole followed by O-methylhydroxylamine hydrochloride. The hydrochloride salt of III demonstrated an IC50 value of 0.0001 .mu.M against binding of 125I-leuporelin at human GnRH receptors expressed in CHO cells.

IT 308831-61-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (prepn. of thienopyrimidines as gonadotropin releasing hormone antagonist)

RN 308831-61-0 CAPLUS

CN Urea, N-[4-[1-[(2,6-difluorophenyl)methyl]-1,2,3,4-tetrahydro-5-[[methyl(phenylmethyl)amino]methyl]-2,4-dioxo-3-phenylthieno[2,3-d]pyrimidin-6-yl]phenyl]-N'-methoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 32 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:742096 CAPLUS

DOCUMENT NUMBER: 133:296325

TITLE: Preparation of xanthine derivatives and analogs as cell signaling inhibitors

INVENTOR(S): Klein, J. Peter; Klaus, Stephen J.; Kumar, Anil M.; Gong, Baoqing

PATENT ASSIGNEE(S): Cell Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 146 pp.

CODEN: PIXXD2

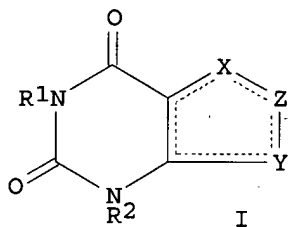
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000061583	A1	20001019	WO 2000-US9139	20000407
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6100271	A	20000808	US 1995-483871	19950607
US 6103730	A	20000815	US 1995-486264	19950607
US 2002028823	A1	20020307	US 1999-288556	19990409
EP 1171442	A1	20020116	EP 2000-921774	20000407
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002541258	T2	20021203	JP 2000-610854	20000407
PRIORITY APPLN. INFO.:			US 1995-483871	A2 19950607
			US 1995-486264	A2 19950607
			US 1999-288556	A2 19990409
			US 1994-199368	B2 19940218
			US 1994-217051	B1 19940324
			US 1998-8020	B2 19980116
			WO 2000-US9139	W 20000407
OTHER SOURCE(S):		MARPAT 133:296325		
GI				

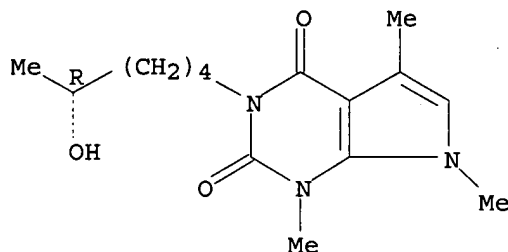


AB Therapeutic compds. I [R1 = H, Me, (un)substituted C5-9-alkyl, C5-9-alkenyl, C5-9-alkynyl, C3-8-hydroxyalkyl, C3-8-alkoxy, C5-9-alkoxyalkyl; R2, R3 = H, halo, oxo, (un)substituted C1-20-alkyl, C1-20-hydroxyalkyl, C(1-20)thioalkyl, C1-20-alkylamino, C1-20-alkylaminoalkyl, C1-20-aminoalkyl, C1-20-aminoalkoxyalkenyl, C1-20-aminoalkoxyalkynyl, C1-20-diaminoalkyl, C1-20-triaminoalkyl, C1-20-tetraaminoalkyl, C5-15-aminotrialkoxyamino, C1-20-alkylamido, C1-20-alkylamidoalkyl, C1-20-amidoalkyl, C1-20-acetamidoalkyl, C1-20-alkenyl, C1-20-alkynyl, C3-8-alkoxyl, C1-11-alkoxyalkyl, and C1-20-dialkoxyalkyl; with the proviso that R1 .noteq. .omega.-1 secondary alc. substituted C5-8-alkyl; X, Y = NR3, R3 = C1-3-alkyl; Z = CR3, R3 = C1-3-alkyl; dashed lines are single or double bonds] pharmaceutically acceptable derivs. (e.g., resolved enantiomers, diastereomers, tautomers, salts and solvates thereof) or prodrugs thereof are described. Thus, CT11495 [I; R1 = Me R2 = (CH2)4CH(OH)Me-(R), X = NMe, YZ= N:CH] was prepd., via N-alkylation of 1,7-dimethylxanthine (I; R1 = Me R2 = H, X = NMe, YZ= N:CH) with (R)-5-acetoxy-1-bromohexane followed by O-deacetylation. These novel heterocyclic compds. I having a six membered ring structure fused to a five membered ring structure are found to be useful for the treatment and prevention of symptoms or manifestations assocd. with disorders affected by Interleukin-12 ("IL-12") intracellular

signalling, such as, for example, Th1 cell-mediated disorders.

IT 301536-59-4P, CT 12458  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); **BIOL (Biological study)**; PREP (Preparation); USES (Uses)  
 (pn. of xanthine derivs. and analogs as cell signaling inhibitors)  
 RN 301536-59-4 CAPLUS  
 CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione, 3-[(5R)-5-hydroxyhexyl]-1,5,7-trimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 33 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:736052 CAPLUS

DOCUMENT NUMBER: 134:97065

TITLE: Kinetic analysis of novel multisubstrate analogue inhibitors of thymidine phosphorylase

AUTHOR(S): Balzarini, J.; Degreve, B.; Esteban-Gamboa, A.; Esnouf, R.; De Clercq, E.; Engelborghs, Y.; Camarasa, M.-J.; Perez-Perez, M.-J.

CORPORATE SOURCE: Rega Institute for Medical Research, Katholieke Universiteit Leuven, Louvain, B-3000, Belg.

SOURCE: FEBS Letters (2000), 483(2,3), 181-185

CODEN: FEBLAL; ISSN: 0014-5793

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A kinetic anal. was performed for the novel 1-(8-phosphono-octyl)-6-amino-5-bromouracil and 1-(8-phosphono-octyl)-7-deazaxanthine inhibitors of Escherichia coli thymidine (dThd) phosphorylase (TPase). The structure of the compds. was rationally designed based on the available crystal structure coordinates of bacterial TPase. These inhibitors reversibly inhibited TPase. Kinetic anal. revealed that the compds. inhibited TPase in a purely competitive or mixed fashion not only when dThd, but also when inorg. phosphate (Pi), was used as the variable substrate. In contrast, the free bases 6-amino-5-bromouracil and 7-deazaxanthine behaved as non-competitive inhibitors of the enzyme in the presence of variable Pi concns. while being competitive or mixed with respect to thymine as the natural substrate. Our kinetic data thus revealed that the novel 1-(8-phosphono-octyl)pyrimidine/purine derivs. are able to function as multisubstrate inhibitors of TPase, interfering at two different sites (dThd(Thy)- and phosphate-binding site) of the enzyme. To our knowledge, the described compds. represent the first type of such multisubstrate analog inhibitors of TPase; they should be considered as lead compds. for the development of mechanistically novel type of TPase inhibitors.

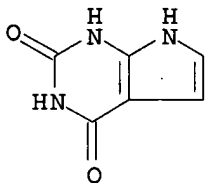
IT 39929-79-8, 7-Deazaxanthine

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **BIOL (Biological study)**

(kinetic anal. of novel multisubstrate analog inhibitors of thymidine

10/ 075,073

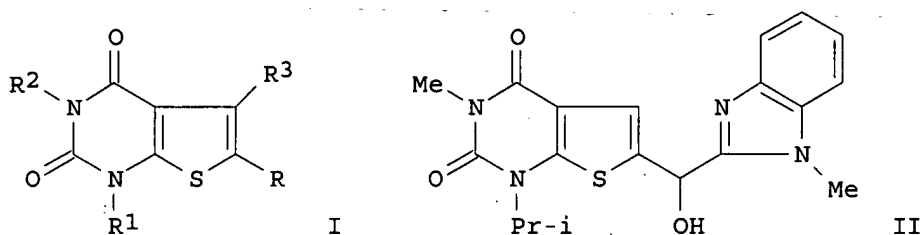
phosphorylase)  
RN 39929-79-8 CAPLUS  
CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 34 OF 90 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 2000:161290 CAPLUS  
DOCUMENT NUMBER: 132:194389  
TITLE: Preparation of thieno[2,3-d]pyrimidine-2,4(1H,3H)-  
diones as immunosuppressants  
INVENTOR(S): Bantick, John; Cooper, Martin; Perry, Matthew; Thorne,  
Philip  
PATENT ASSIGNEE(S): Astra Pharmaceuticals Ltd., UK; Astra Aktiebolag  
SOURCE: PCT Int. Appl., 99 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000012514	A1	20000309	WO 1999-SE1400	19990818
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2339664	AA	20000309	CA 1999-2339664	19990818
AU 9957677	A1	20000321	AU 1999-57677	19990818
EP 1107973	A1	20010620	EP 1999-944964	19990818
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
JP 2002523511	T2	20020730	JP 2000-567536	19990818
NZ 509809	A	20021126	NZ 1999-509809	19990818
US 6300334	B1	20011009	US 1999-402837	19991013
PRIORITY APPLN. INFO.:			SE 1998-2895 A 19980828	
			WO 1999-SE1400 W 19990818	
OTHER SOURCE(S):	MARPAT 132:194389			
GI				



AB The title compds. (I) [wherein R = C(O)Ar1 or C(R4)(R5)Ar1; R1 and R2 = independently H, (cyclo)alkyl, alkenyl, or cycloalkylmethyl; R3 = H or XR9 or XAr2; R4 = H or alkyl; R5 = H or OH; R9 = Me optionally substituted by 1 or more CN, CO<sub>2</sub>H, alkoxycarbonyl, tetrazolyl, (un)substituted carboxyamido; R10 = H, alkyl, or R9; X = O, S(O)<sub>n</sub>, C(O)NR10, C(O)O, NHC(O)NR10, NHC(O)O, or SO<sub>2</sub>NR10; Ar1 = (un)substituted heteroaryl, Ar2 = (un)substituted Ph, pyridinyl, thienyl, pyridone, or pyridine N-oxide; n = 0-2] were prepd. as immunosuppressants. for the treatment of reversible obstructive airway diseases, such as asthma, bronchitis, and rhinitis. For example, II was formed in a 4-step sequence involving (1) N-addn. of 1-iodo-2-methylpropane to 6-chloro-3-methyl-1H-pyrimidine-2,4-(1H,3H)-dione, (2) thiolation of the chloro compd. with NaSH.H<sub>2</sub>O, (3) cycloaddn. of the 6-thioxopyrimidinedione with aq. ClCH<sub>2</sub>CHO, and (4) coupling of the thienopyrimidinedione with 1-methylbenzimidazole-2-carboxaldehyde. In a PMA/ionomycin-stimulated peripheral blood mononuclear cell (PBMC) proliferation assay, I exhibited IA50 values of < 1 .mu.M.

IT 259861-26-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation);

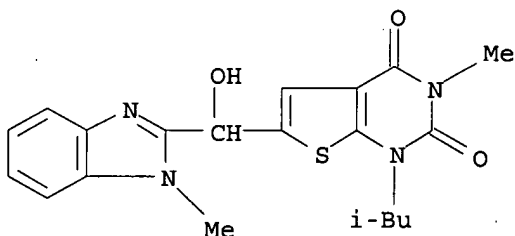
**BIOL (Biological study); BIOL (Biological study); PREP**

(Preparation); RACT (Reactant or reagent); USES (Uses)

(target compd.; prepn. of thieno[2,3-d]pyrimidine-2,4(1H,3H)-diones as immunosuppressants)

RN 259861-26-2 CAPLUS

CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 6-[hydroxy(1-methyl-1H-benzimidazol-2-yl)methyl]-3-methyl-1-(2-methylpropyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 35 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:96284 CAPLUS

DOCUMENT NUMBER: 132:305019

TITLE: Design, Synthesis, and Enzymatic Evaluation of Multisubstrate Analogue Inhibitors of Escherichia coli Thymidine Phosphorylase

AUTHOR(S): Esteban-Gamboa, Antonio; Balzarini, Jan; Esnouf, Robert; De Clercq, Erik; Camarasa, Maria-Jose;

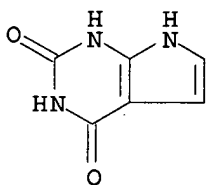
CORPORATE SOURCE: Perez-Perez, Maria-Jesus  
 Instituto de Quimica Medica, C.S.I.C., Madrid, 28006, Spain  
 SOURCE: Journal of Medicinal Chemistry (2000), 43(5), 971-983  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB A series of acyclic phosphonate derivs. of thymine has been synthesized and tested as multisubstrate analog inhibitors of Escherichia coli thymidine phosphorylase. The compds. synthesized include 1-(phosphonoalkyl)thymines with six to nine methylenes (1-4, resp.); 1-[(Z)-4-phosphonomethoxy-2-butenyl]thymine (5) and its Bu and 2,3-cis-dihydroxybutyl derivs. (6 and 7, resp.); 1-[(Z)-4-(phosphonomethoxy)methoxy]-2-butenyl]thymine (8) and also its Bu and 2,3-cis-dihydroxybutyl analogs (9 and 10); and 1-[(Z)-4-(phosphonomethoxy)-2-butenoxy)methyl]thymine (11). Evaluation of these compds. against E. coli revealed significant enzymic inhibition by 2, 3, 4, 6, and 8 at a concn. of 1000 .mu.M, 3 and 4 being the most potent. Replacement of the thymine base in 3 by 6-amino-5-bromouracil and 7-deazaxanthine afforded compds. 12 and 13, which showed a pronounced improvement of TPase inhibition, comparable to 7-deazaxanthine. When inorg. phosphate was used as a variable substrate, compds. 12 and 13 displayed competitive kinetics with respect to phosphate, indicating a direct interaction of these compds. with the phosphate binding site. Also compds. 12 and 13 were found to be competitive inhibitors of TPase against thymidine as a variable substrate. These results are consistent with the compds. being multisubstrate analog inhibitors of E. coli TPase, and they represent the first example of such TPase inhibitors.

IT 39929-79-8P, 7-Deazaxanthine  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (design, synthesis, and enzymic evaluation of multisubstrate analog inhibitors of thymidine phosphorylase)

RN 39929-79-8 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione (9CI) (CA INDEX NAME)



REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 36 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:68462 CAPLUS

DOCUMENT NUMBER: 132:107962

TITLE: Preparation of piperazinyalkyl pyrimidinedione compounds selective for adrenoceptors

INVENTOR(S): Meyer, Michael D.; Carroll, William A.

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

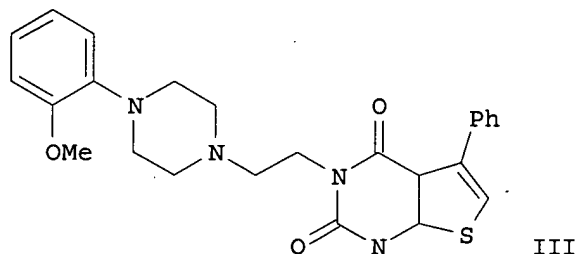
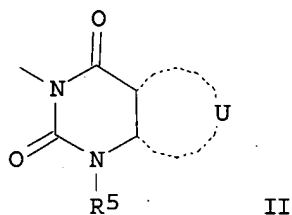
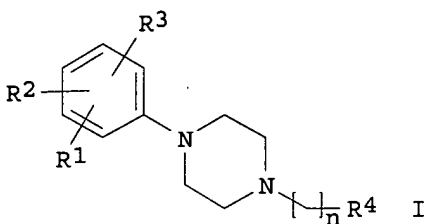
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000004027	A1	20000127	WO 1999-US15732	19990712
W: CA, JP, MX				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6153614	A	20001128	US 1998-116376	19980716
CA 2336950	AA	20000127	CA 1999-2336950	19990712
EP 1095044	A1	20010502	EP 1999-933919	19990712
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002520417	T2	20020709	JP 2000-560133	19990712
PRIORITY APPLN. INFO.:			US 1998-116376	A 19980716
			WO 1999-US15732	W 19990712
OTHER SOURCE(S):		MARPAT 132:107962		
GI				



AB The title compds. [I;  $R_1$ - $R_3$  = halo, OH,  $NO_2$ , etc.;  $R_4$  = II (wherein U taken together with the carbon atoms to which it is attached, forms a mono- or disubstituted 5-membered heterocycle having 4 carbon atoms, 2 double bonds, and one heteroatom selected from O, S, NH, N(alkyl), a mono or disubstituted 6-membered heterocycle contg. 3 double bonds and either 1, 2 or 3 N atoms, etc.;  $R_5$  = H, alkyl, alkenyl, etc.);  $n$  = 2-10] and their pharmaceutically acceptable salts, which are selective  $\alpha$ -1D adrenoceptor antagonists and may be useful for treating disease states such as benign prostatic hyperplasia, hypertension, detrusor instability and incontinence, were prepd. E.g., a 3-step synthesis of III.MeSO<sub>3</sub>H which showed  $K_i$  of 0.213 nM against  $\alpha$ .1D binding (rat), was given.

IT 255713-48-5P

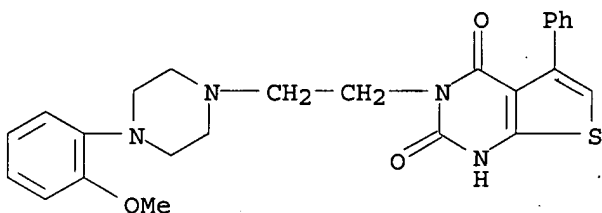
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(prepn. of piperazinylalkyl pyrimidinedione compds. selective for adrenoceptors)

10/ 075,073

RN 255713-48-5 CAPLUS  
CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-5-phenyl-, monomethanesulfonate (9CI) (CA INDEX NAME)

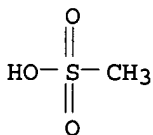
CM 1

CRN 255713-47-4  
CMF C25 H26 N4 O3 S



CM 2

CRN 75-75-2  
CMF C H4 O3 S



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT.

L8 ANSWER 37 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:760843 CAPLUS

DOCUMENT NUMBER: 132:151768

TITLE: Synthesis and molluscicidal activity of some new thieno[2,3-d]pyrimidinones and their related derivatives

AUTHOR(S): Hosni, Hanaa M.

CORPORATE SOURCE: Pesticide Chem. Dept., National Research centre, Cairo, Egypt

SOURCE: Egyptian Journal of Chemistry (1999), 42(5), 469-480  
CODEN: EGJCA3; ISSN: 0449-2285

PUBLISHER: National Information and Documentation Centre

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Title compds. were prepd. from aminobithienylcarboxylate. The starting material and the thienopyrimidotriazole products showed excellent molluscicidal activity against Biomphalaria alexandrina.

IT 257870-39-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

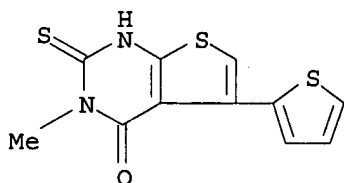
(prepn. and molluscicidal activity of some new thieno[2,3-d]pyrimidinones and related compds.)

RN 257870-39-6 CAPLUS

CN Thieno[2,3-d]pyrimidin-4(1H)-one, 2,3-dihydro-3-methyl-5-(2-thienyl)-2-

10/ 075,073

thioxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 38 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:659358 CAPLUS

DOCUMENT NUMBER: 131:286264

TITLE: Preparation of phenylsulfonamide derivatives as proteinase and aggrecanase inhibitors

INVENTOR(S): Kimura, Tomio; Miyazaki, Shoujiro; Ueda, Keiji; Tanzawa, Kazuhiko; Ushiyama, Shigeru; Takasaki, Wataru

PATENT ASSIGNEE(S): Sankyo Company, Limited, Japan

SOURCE: PCT Int. Appl., 285 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9951572	A1	19991014	WO 1999-JP1751	19990402
W: AU, BR, CA, CN, CZ, HU, ID, IL, IN, KR, MX, NO, NZ, PL, PT, RU, TR, US, ZA				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2327290	AA	19991014	CA 1999-2327290	19990402
AU 9929615	A1	19991025	AU 1999-29615	19990402
AU 756248	B2	20030109		
JP 2000319250	A2	20001121	JP 1999-96827	19990402
BR 9909398	A	20001226	BR 1999-9398	19990402
EP 1069110	A1	20010117	EP 1999-910822	19990402
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
NO 2000004949	A	20001107	NO 2000-4949	20001002
PRIORITY APPLN. INFO.:				
			JP 1998-91819	A 19980403
			JP 1999-53164	A 19990301
			WO 1999-JP1751	W 19990402

OTHER SOURCE(S): MARPAT 131:286264

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. R5OR4SO2N(R3)CH(R2)COR1 [I; wherein R1 is H or NHOH; R2 is H, optionally substituted alkyl, cycloalkyl, or AR6 (wherein A is O, S(O)m, or alkylene optionally interrupted by N(R9); and R6 is a group represented by Q, Q1, Q2 wherein X is O, S, N(R10), or C(R11)(R12); Y is O, CO, S(O)n, N(R10), or C(R11)(R12); R7 and R8 each is H, alkyl, COOH, optionally substituted alkyl, etc.; R9, R10, R11, and R12 each is H,

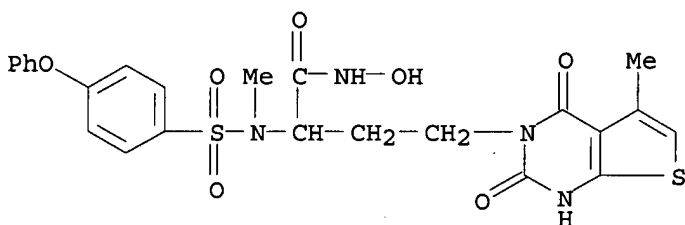
alkyl, etc.; and m and n each is 0 to 2); R3 is H, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted alkenyl, or optionally substituted alkynyl; R4 is optionally substituted (hetero)arylene; and R5 is optionally substituted alkyl or optionally substituted (hetero)aryl], stereoisomers, pharmacol. acceptable salts, esters, or other derivs. thereof are prepd. and tested as matrix metalloproteinase-13 inhibitors and aggrecanase inhibitors. Thus, the title compd. II was prepd.

## IT 246263-34-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of phenylsulfonamides as proteinase and aggrecanase inhibitors)

RN 246263-34-3 CAPLUS

CN Thieno[2,3-d]pyrimidine-3(2H)-butanamide, 1,4-dihydro-N-hydroxy-5-methyl-.alpha.-[methyl[(4-phenoxyphenyl)sulfonyl]amino]-2,4-dioxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 39 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:795022 CAPLUS

DOCUMENT NUMBER: 130:38396

TITLE: Preparation of thieno[2,3-d]pyrimidinediones in treatment of reversible obstructive airways disease  
INVENTOR(S): Cheshire, David; Cooke, Andrew; Cooper, Martin; Donald, David; Furber, Mark; Perry, Matthew; Thorne, Philip

PATENT ASSIGNEE(S): Astra Pharmaceuticals Ltd., UK; Astra Aktiebolag

SOURCE: PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9854190	A1	19981203	WO 1998-SE935	19980518
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9876808	A1	19981230	AU 1998-76808	19980518
AU 723708	B2	20000907		
EP 991653	A1	20000412	EP 1998-924705	19980518
EP 991653	B1	20021016		

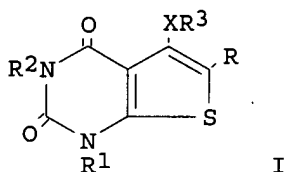
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

EE 9900539	A	20000615	EE 1999-539	19980518
EE 4018	B1	20030415		
BR 9809481	A	20000620	BR 1998-9481	19980518
JP 2002500666	T2	20020108	JP 1999-500565	19980518
AT 226205	E	20021115	AT 1998-924705	19980518
ES 2184270	T3	20030401	ES 1998-924705	19980518
US 6180635	B1	20010130	US 1998-117426	19980730
MX 9910911	A	20000430	MX 1999-10911	19991125
NO 9905810	A	20000127	NO 1999-5810	19991126
US 6342502	B1	20020129	US 2000-693896	20001023
US 6469014	B1	20021022	US 2001-977944	20011017
US 2002183337	A1	20021205		

PRIORITY APPLN. INFO.:

SE 1997-2001	A	19970528
WO 1998-SE935	W	19980518
US 1998-117426	A1	19980730
US 2000-693896	A1	20001023

OTHER SOURCE(S): CASREACT 130:38396; MARPAT 130:38396  
GI



AB Title compds. [I; R is arylcarbonyl, aryl, arylalkyl; R1 and R2 are independently H, alkyl, alkenyl, cycloalkyl; X represents S(O)<sub>n</sub>, COO, NHCOO, etc.; R3 is Ph, pyridyl, CN, CO<sub>2</sub>H, SO<sub>2</sub>NH<sub>2</sub>, etc.; n is 0, 1, 2], stereoisomers, a pharmaceutically-acceptable salt or solvate are prep'd. via cyclization and oxidn. processes. Title compds. were useful in the (prophylactic) treatment of autoimmune, inflammatory, proliferative and hyperproliferative diseases and immunol.-mediated diseases including rejection of transplanted organs or tissues and Acquired Immunodeficiency Syndrome (AIDS).

IT 216685-02-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation);

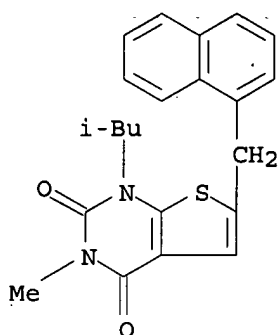
**BIOL (Biological study); BIOL (Biological study); PREP**

(Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of thienopyrimidinediones in treatment of reversible obstructive airway disease)

RN 216685-02-8 CAPLUS

CN Thieno[2,3-d]pyrimidine-2,4(1H,3H)-dione, 3-methyl-1-(2-methylpropyl)-6-(1-naphthalenylmethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 40 OF 90 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:764730 CAPLUS

DOCUMENT NUMBER: 130:119563

TITLE: 7-Deazaxanthine, a novel prototype inhibitor of thymidine phosphorylase

AUTHOR(S): Balzarini, Jan; Gamboa, Antonio Esteban; Esnouf, Robert; Liekens, Sandra; Neyts, Johan; De Clercq, Erik; Camarasa, Maria-Jose; Perez-Perez, Maria-Jesus  
CORPORATE SOURCE: Rega Institute for Medical Research, K.U. Leuven, Louvain, B-3000, Belg.

SOURCE: FEBS Letters (1998), 438(1,2), 91-95

CODEN: FEBLAL; ISSN: 0014-5793

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

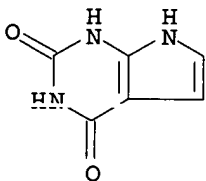
AB 7-Deazaxanthine (7DX) was identified as a novel inhibitor of thymidine (dThd) phosphorylase (TPase). It inhibited the TPase reaction in a concn.-dependent manner. At 1 mM, it almost completely prevented the TPase-catalyzed hydrolysis of dThd to thymine. The 50% inhibitory concn. (IC50) of 7DX was 40 .mu.M in the presence of 100 .mu.M of the natural substrate dThd. 7DX is also endowed with a marked inhibitory effect on angiogenesis. It significantly prevents neovascularization in the chicken chorioallantoic membrane during development. 7DX is the first purine deriv. shown to be a potent inhibitor of purified TPase and angiogenesis.

IT 39929-79-8, 7-Deazaxanthine

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(7-deazaxanthine prototype inhibitor of thymidine phosphorylase)

RN 39929-79-8 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidine-2,4(3H,7H)-dione (9CI) (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 41 OF 90 CAPLUS COPYRIGHT 2003 ACS